Alation Integrations

Alation User Documentation

Oct 23, 2024

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CHAPTER

ONE

ALATION ANYWHERE

Alation Anywhere is a set of features that integrate Alation with other software you use, so you can access and use Alation data anywhere. For example, you can see curated data descriptions in Tableau or search Alation from within Slack.

Alation Anywhere offers the following integrations:

- *Slack*
- *Tableau*
- *Microsoft Teams*

1.1 Alation Anywhere for Slack

Alation Cloud Service

Available from 2022.4

With Alation Anywhere for Slack, you can connect Alation to Slack and perform the following actions directly within Slack:

- Search the Alation catalog.
- See rich previews of Alation catalog pages when you paste a link, and interact with the page by starring or watching it.
- Start and reply to Alation Conversations about catalog objects.

By using Alation Anywhere for Slack, you can get more work done without leaving the context of your important work conversations.

1.1.1 Prerequisites

To use Alation Anywhere for Slack, you must meet the following prerequisites:

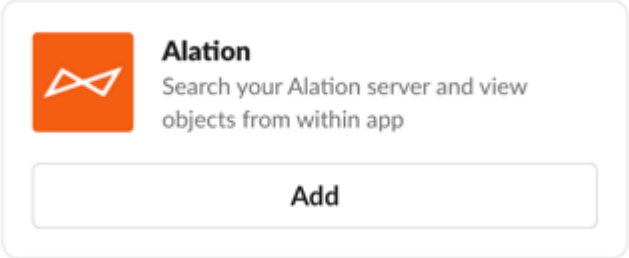
- You must be using Alation Cloud Service and be on the cloud native architecture.
  - To determine if you're already on the cloud native architecture or to request migration to it, contact Alation Support.
  - Alation Anywhere for Slack is not available for on-premise installations of Alation.
- You can't be using Slack's Enterprise Grid deployment. It isn't supported.

- A Slack workspace can only connect to a single instance of Alation. If you're logged into multiple Slack workspaces, you can connect to a different instance of Alation in each workspace.

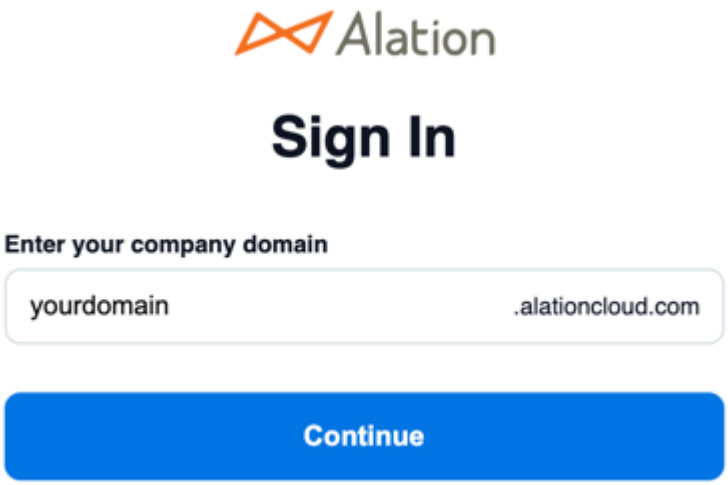
1.1.2 Install the Alation App in Slack

To use Alation Anywhere for Slack, you have to install the Alation app in Slack.

1. Find the app in one of the following ways:
   - On the web:
     a. Visit the Alation app page in the Slack App Directory online.
     b. Click **Add to Slack**.
   - In Slack:
     a. Click **Apps** in the top left corner. If you don't see this option, click **More** or **Browse Slack** to find it. The Slack App Directory will open inside Slack.
     b. Search for "Alation." When you find it, click **Add**.



     c. A new browser tab will open with information about the Alation Slack app. Click **Add to Slack**.
2. If you don't have permission to install apps in Slack, you may need to submit a request to have it installed.
3. If you have permission to install apps, the Slack app directory informs you what permissions Alation needs to connect to Slack. Click **Allow** to continue connecting.
4. Enter your company's Alation domain, then click **Continue**.



Important: You have ten minutes to enter your Alation domain. If you take more than ten minutes, you'll have to start the installation process over again.

5. A success message should appear. Click **Go to Slack** to open your Slack workspace and start using Alation in Slack. You must first log into your Alation account in Slack. See the next section for instructions.

1.1.3 Log Into Alation in Slack

To use Alation Anywhere for Slack, you must be logged into Alation through Slack. To log into the Alation Slack app:

1. Type /**alation login** or attempt to search Alation by typing /**alation search search_term**. A message will appear in Slack asking you to log in.
2. Click **Connect**.
    a. If you are currently logged into Alation, a new browser tab will open with a message that you've successfully authenticated.
    b. If you're not currently logged into Alation, a new browser tab will open to the Alation login screen or your identity provider. Enter your credentials and log in. You'll then see a message that you've successfully authenticated.
3. Click **Go to Slack**. If your browser asks whether to open Slack, allow it.
4. When Slack opens, you should see a message that you have connected with Alation.

Note: If you clicked **Not now**, you will be asked to log in again next time you enter an /**alation** command. If you clicked **Don't ask again**, the only way you can log in is by entering /**alation login**.

1.1.4 Log Out of Alation in Slack

To log out of the Alation Slack app, type /**alation logout**. This disconnects Alation from Slack. You will no longer be able to search Alation within Slack or see rich previews of Alation links until you log back in.

1.1.5 Search Alation in Slack

By searching Alation within Slack, you don't have to leave the context of a Slack conversation to find and post information from your Alation catalog.

To search Alation in Slack, type /**alation search search_terms** in Slack. You can enter one or more words for the search term. Press Enter to submit the search. A pop-up appears showing you the top search result from Alation.

Note: You can also search using the simplified /**alation search_terms** command. But you won't be able to use the simplified search command to search for words that are reserved as commands, like "help," "login," and "logout." Instead you would have to use the full search command, for example /**alation search login**.

From the search pop-up, you can:

- Post the top search result to the Slack conversation by clicking **Send it in chat**. A *preview* of that catalog page will be sent to the Slack channel. It may be a basic preview or a rich preview, depending on the catalog page.
- Open the catalog page for the top search result in Alation by clicking the search result's title.
- See the top ten search results in Slack by clicking **See more results**. You can then filter by object type, modify the search terms, and resubmit the search to get updated results while still in Slack.

  Note: When viewing multiple search results, each result has its own **Send it in chat** button. The search window stays open when you click this button, so you can send multiple results to the chat quickly. Click **Close** to exit the search window.

  In private channels and direct messages, you can only send up to five results in a row to the chat. To send more, click **Close** to exit the search window and run the same search again.

- See the full search results in Alation by clicking **Go to Alation Page**.

1.1.6 Preview Alation Catalog Pages in Slack

When you post a Slack message containing a link to an Alation catalog page, a preview of the catalog page appears attached to the message. That way, readers of the message don't have to go into Alation to understand what you're talking about.

All catalog pages will show a basic preview in Slack, while certain pages will show a rich preview with additional features.

Catalog pages that have rich previews include:

- Articles
- Article groups (old glossaries)
- Conversations
- Data source objects
- Queries
- Table objects

From a rich preview, you can:

- Open the catalog page in Alation by clicking on the page title.
- See additional information by clicking the buttons at the bottom of the preview. For example, you can see custom fields for an article, a list of columns for a table, raw SQL for a query, and so forth. You can also *view and start Conversations* about the catalog page.
- See trust check flags next to the page title. Hover over the icon to see what kind of flag it is.
- Star or watch the page by clicking **See more** at the bottom of the preview.
- For queries, open the query in Compose or open the query form by clicking **See more**.

1.1.7 Conversations in Slack

Applies to 2023.3 and newer

You can interact with Alation Conversations inside Slack, so you don't have to leave Slack to ask and answer questions in Alation. There are two ways to do this:

- Paste a direct link to an Alation Conversation in Slack
- Use the Conversations button on a rich preview of an Alation catalog page in Slack

Direct Link to a Conversation

When you post a Slack message containing a link to an Alation Conversation, Slack will show a rich preview of the Conversation where you can see its details and reply to it. In the rich preview, you'll see the Conversation subject, author, and body, along with links and buttons to interact with the Conversation. From the preview you can:

- Open the Conversation in Alation by clicking the Conversation subject.
- Open the author's user profile in Alation by clicking the author's name.
- See details about the Conversation by clicking the **Details** button. You'll see the Conversation's assignee, author, participants, and the Alation catalog page the Conversation refers to. Click on any of these to open their corresponding pages in Alation.
- Reply to the Conversation and see other replies by clicking the **See all replies** button.
- Resolve or reopen the Conversation by clicking **See more** and then clicking the **Mark Resolved** or **Reopen** button.

Conversations in Rich Previews

Catalog pages that support *rich previews* in Slack will have a **Conversations** button. Click the button, and a dialog box will open showing a list of existing Conversations that refer to the catalog object. From there, you can:

- Open a Conversation in Alation by clicking the Conversation subject.
- Open an author's user profile in Alation by clicking the author's name.
- Send a rich preview of a Conversation to Slack by clicking the **Send to chat** button. Anyone in the Slack channel can then interact with the Conversation as described above.
- Start a new Conversation about the catalog object by clicking the **New conversation** button. In the dialog box that appears, enter a subject and body, then click **Post**. This will create the Conversation in Alation, link it to the catalog object, and assign it to you. It will also send a success message to the Slack channel. Next time you view the rich preview for the relevant catalog object and click the **Conversations** button, you can then interact with the new Conversation in Slack.

1.1.8 Get Help in Slack

Type /**alation help** in Slack to get help directly within Slack.

1.1.9 Troubleshooting

If you enter an /**alation** command in Slack and get an error message saying /**alation failed with the error "dispatch_failed"**, then your message has failed to reach Alation. Check your internet connection and try again.

1.1.10 Support and Privacy

Alation support email: support@alation.com

Alation support site: https://alation.force.com

Alation privacy policy: https://alation.com/privacy-policy

1.2 Alation Anywhere for Tableau

Alation Cloud Service **Customer Managed**

Available from 2022.4

With Alation Anywhere for Tableau, users of Tableau can see certain metadata from Alation directly within Tableau. This enables Tableau users to see data descriptions, warnings, and more in Tableau itself. Alation serves as the single source of truth while supporting data users in their chosen context.

Starting in 2023.1, Alation Anywhere for Tableau is enabled automatically for all customers. On older versions, a Server Admin can *enable this feature*.

To *configure* Alation Anywhere for Tableau, you must be a BI Server Admin for your Tableau source in Alation. For help with BI Server Admin access, see /sources/OpenConnectorFramework/ConfigureAccessToOCFBISources.

1.2.1 Prerequisites

To use Alation Anywhere for Tableau, the following prerequisites must be met:

- Alation and Tableau must be connected to the data source whose data you want to sync. This must be an external RDBMS data source. It can't be an XSL or CSV that's embedded on the Tableau server.
- You must have added Tableau Data Management to your Tableau deployment. This enables us to use the Tableau APIs to send data to Tableau.
- You must have the Tableau OCF connector version 1.2.0 or later installed in Alation.
- You must have connected Alation to an instance of Tableau Cloud or Tableau Server version 2021.3 or later.
- You must have performed metadata extraction with this connector at least once. You must have added curated metadata, such as descriptions, tags, and trust check flags to the data.

Important: Alation Anywhere for Tableau does not yet support connections between Alation Cloud Service and an on-premise Tableau connector installed with the Alation Agent.

1.2.2 Permissions

During the upload of metadata to Tableau, no user permissions are uploaded. Tableau and Alation are separate applications with separate permissions management. Some items visible for one user in Alation might have restricted access in Tableau and vice versa. During metadata upload the permissions are not transferred between applications.

For the purpose of the metadata upload job, the provided credentials and tokens should be granted permissions to access all objects whose metadata should be updated.

1.2.3 Enable Alation Anywhere for Tableau

Starting in 2023.1, Alation Anywhere for Tableau is enabled automatically for all customers.

To use Alation Anywhere for Tableau on older versions, you must first enable the feature on your Alation instance. To enable this feature for on-premise instances, you must be a Server Admin with access to the Alation server.

Note: Alation Cloud Service customers can request server configuration changes through Alation Support.

To enable Alation Anywhere for Tableau for on-premise instances in 2022.4 and earlier:

1. Use SSH to connect to the Alation server.
2. Enter the Alation shell using the following command:

```
sudo /etc/init.d/alation shell
```

3. Enter the following command:

```
alation_conf alation.ocf.bi.upload_lms_data -s True
```

4. *(Optional)* By default, Alation will sync metadata for databases, tables, and columns. You can configure which object types will be synced using the following command, removing the object type for which you don't want to sync metadata:

```
alation_conf tableau.upload.scope -s databases,tables,columns
```

1.2.4 Enable and Schedule Metadata Upload to Tableau

To configure Alation Anywhere for Tableau, you must be a BI Server Admin for your Tableau source in Alation. You can enable and disable the feature, and you can send metadata to Tableau manually or set up an automatic schedule. The instructions depend on what version of Alation and the Tableau connector you have.

For Alation 2024.1.2 and newer *with* Tableau connector 1.9.0 and newer:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.

3. Click **BI Servers** on the left.
4. Click on the wrench icon to the right of your Tableau source name.
5. Click the **Metadata Upload** tab and toggle **Enable Automated Upload** on or off.
6. To set up the schedule, click the drop-down arrows for each part of the schedule and select the desired options.

For any other older versions:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.
3. Click **BI Servers** on the left.
4. Click on the wrench icon to the right of your Tableau source name.
5. Scroll down to **Metadata Upload From Alation to BI Server** and toggle **Enable Automated Upload** on or off.
6. To set up the schedule, click the drop-down arrows under **Automated Upload Time** and select the desired options.

Note: Here are some recommended schedules for better performance:

- Every 12 hours at the 30th minute of the hour.
- Every 2 days at 11:30 PM.
- Every week on Sunday and Wednesday.
- Every 3 months on the 15th day of the month.

1.2.5 Encrypt the Connection with an SSL Certificate

If you have Tableau Server (on-premise), you can make the connection to Alation secure by uploading a custom SSL certificate to encrypt the data upload.

If you have Tableau Cloud, the connection is already encrypted, so you do not need to upload an SSL certificate. You may upload a custom certificate if desired.

Note: The information in this section only applies to the metadata upload from Alation to Tableau. However, the Tableau connector can only have one SSL certificate, which will apply to both metadata extraction and metadata upload (if configured to use encryption).

SSL Certificate Options

There are three options available for custom SSL certificates, depending on the version of Alation you're using:

- SSL certificate signed by a Certificate Authority
- Self-signed SSL certificate (2023.1.6 and newer)
- Disabled certificate (2023.1.6 and newer)

These options are described below.

SSL Certificate Signed by a Certificate Authority

In all versions of Alation, you can encrypt the connection with an SSL certificate signed by a recognized Certificate Authority. These are also known as public certificates.

Self-Signed SSL Certificate

Applies to 2023.1.6 and newer

From version 2023.1.6 of Alation, you can encrypt the connection with a self-signed SSL certificate. These are also known as private certificates. These custom certificates are signed by your organization itself rather than a Certificate Authority.

Self-signed certificates should be uploaded as a full chain certificate, not a single certificate. Make sure you have selected the right option when downloading it from the Tableau server.

Disabled Certificate

Applies to 2023.1.6 and newer

From version 2023.1.6, you can also disable SSL verification for metadata extraction and metadata upload. This turns off encryption when data is sent over the open internet. For security reasons, we do not recommend this. However, you may want to do this temporarily for troubleshooting or testing or if your certificate has expired.

Configure Encryption Settings

Applies to 2023.1.6 and newer

From version 2023.1.6, you can configure what kind of encryption settings the Tableau connector will use for metadata upload from Alation to Tableau.

Encryption Parameters

There are two parameters in **alation_conf** that control the encryption behavior:

- `tableau.upload.mode`
- `tableau.upload.connection_encryption`

The `tableau.upload.mode` parameter determines whether the new encryption options in 2023.1.6 can be used for metadata upload from Alation to Tableau. It has two possible values:

- `production`—Maintains the older behavior where only SSL certificates assigned by a Certificate Authority can be used.
- `production_v2`—Enables the options in 2023.1.6 and newer. SSL certificates can be signed by a Certificate Authority, self-signed, or disabled. Enabled by default from version 2023.3.2.

The `tableau.upload.connection_encryption` parameter determines what encryption behavior to use for metadata upload from Alation to Tableau. It is only used when `tableau.upload.mode` is set to `production_v2`. It has three possible values:

- `default`—The encryption will be based on the **Disable SSL Certification** checkbox on the BI server settings page in Alation.

- `true`—Metadata upload will always be encrypted with the provided SSL certificate. The **Disable SSL Certification** checkbox will be ignored for metadata upload.
- `false`—Metadata upload will not be encrypted. The **Disable SSL Certification** checkbox will be ignored for metadata upload.

Change Encryption Parameters

On customer-managed (on-premise) instances of Alation, you must be a Server Admin to change the parameters on the Alation server.

Note: Alation Cloud Service customers can request server configuration changes through Alation Support.

To configure encryption settings for customer-managed instances of Alation:

1. Use SSH to connect to the Alation server.
2. Enter the Alation shell using the following command:

```
sudo /etc/init.d/alation shell
```

3. Enter the following command, providing the desired value as described above:

```
alation_conf tableau.upload.mode -s <value>
```

4. Enter the following command, providing the desired value as described above:

```
alation_conf tableau.upload.connection_encryption -s <value>
```

Configure Encryption Settings on the Tableau Data Source

To configure encryption settings for Tableau, you must be a BI Server Admin for the Tableau source in Alation. The instructions for configuring encryption settings depend on what version of Alation and the Tableau connector you have.

For Alation 2024.1.2 and newer *with* Tableau connector 1.9.0 and newer:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.
3. Click **BI Servers** on the left.
4. Click on the wrench icon to the right of your Tableau source name.
5. Click the **General Settings** section.
6. Use the **Upload SSL certificate** toggle to enable or disable SSL encryption.
7. With the **Upload SSL certificate** toggle enabled, click **Upload** and select your certificate.
8. Click **Save**.

For any other older versions:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.
3. Click **BI Servers** on the left.

4. Click on the wrench icon to the right of your Tableau source name.
5. Scroll down to the **Additional Settings** section.
6. Select or deselect the **Disable SSL Certification** checkbox as desired.
7. If you're using SSL encryption, under **Server SSL Certificate**, click **upload** and select your certificate.

1.2.6 Monitor Alation Anywhere for Tableau

There are two ways to monitor Alation Anywhere for Tableau.

- *Upload Job Status Dashboard*
- *Extended Logging*

Upload Job Status Dashboard

Starting in 2023.1, you can monitor the status of the data transfer from Alation to Tableau. To do this, you must be a BI Server Admin for the Tableau source in Alation. The instructions depend on what version of Alation and the Tableau connector you have.

For Alation 2024.1.2 and newer *with* Tableau connector 1.9.0 and newer:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.
3. Click **BI Servers** on the left.
4. Click on the wrench icon to the right of your Tableau source name.
5. Click the **Metadata Upload** tab, then click **Upload Job History**. The **Upload Job Status** table shows the latest upload jobs, their status, and any errors that may have occurred.

For any other older versions:

1. In Alation, click **Apps** in the top right corner, then click **Sources**.
2. Click the **Manage Settings** tab.
3. Click **BI Servers** on the left.
4. Click on the wrench icon to the right of your Tableau source name.
5. Scroll down to **Metadata Upload From Alation to BI Server**. The **Upload Job Status** table shows the latest upload jobs, their status, and any errors that may have occurred.

On the **Upload Job Status** table, you can:

- Click **Refresh** to update the table.
- Use the **Prev** and **Next** buttons below the table to see more jobs.
- Click the **View Details** link to see full error messages and other details.
  - If there are errors, the **Job errors** table displays the error category, error message, and a hint (ways to resolve the issue). Follow the instructions under the **Hints** column to resolve the error.
  - In some cases, **Generate Error Report** link is displayed above the **Job errors** table. Click the **Generate Error Report** link above the **Job errors** table to generate an archive (.zip) containing CSV files for different error categories, such as data or connection errors. Click **Download Error Report** to download the files.

Extended Logging

Starting in 2023.1.4, Alation can record extended logging about the data transfer from Alation to Tableau. The logs can be particularly helpful in identifying cases where a table fails to be synced due to having the same name as another table. You must be a Server Admin to enable extended logging for customer-managed (on-premises) instances of Alation.

Note: Alation Cloud Service customers can request server configuration changes through Alation Support.

To enable logging for customer-managed instances of Alation:

1. Use SSH to connect to the Alation server.
2. Enter the Alation shell using the following command:

```
sudo /etc/init.d/alation shell
```

3. Enter the following command:

```
alation_conf tableau.upload.detailed_logging_enabled -s True
```

Logs will be visible on the Alation server in **celery-metadata_upload.log** and **celery-metadata_upload_-error.log**.

1.2.7 Understand How Alation Sends Metadata to Tableau

After enabling Alation Anywhere for Tableau, there are two stages in the process of getting metadata into Tableau. First Alation sends the metadata to Tableau. Then Tableau propagates the metadata to specific objects.

It may take some time for the metadata to fully propagate. For example, an upload of 10,000 objects may take about 6 minutes to send from Alation to Tableau and about 4 hours for Tableau to fully propagate the metadata.

Alation sends metadata for the following data objects:

- Data sources
- Tables
- Columns

Alation sends the following metadata to Tableau:

- Trust check flags
  - Warnings
  - Deprecations
  - Endorsements (starting in 2023.1.4)
- Descriptions
- Tags

If a data object has both warning and deprecation flags, the flag will appear as a deprecation in Tableau, but the description for both the warning and the deprecation will be shown.

Starting in 2023.1.4, Alation uploads additional data:

- Endorsement flags, which are displayed as certifications in Tableau.
- Descriptions and tags inherited from catalog sets.

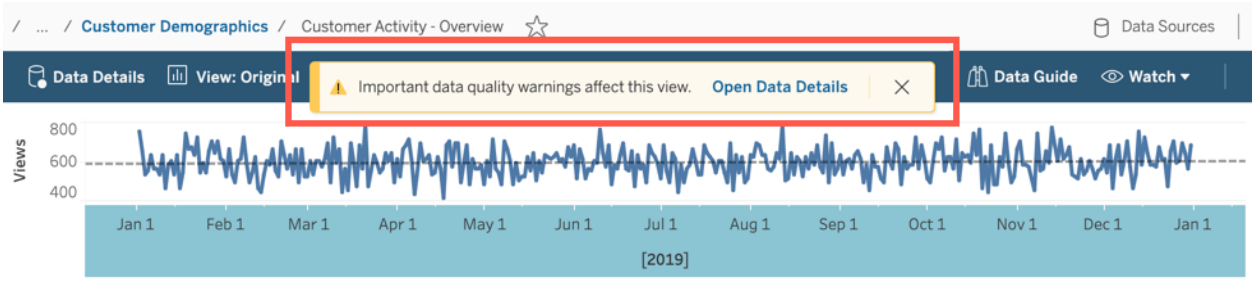
Important: The Tableau API limits our ability to delete tags and descriptions from Tableau. Deleting a tag or description in Alation will not delete the corresponding data in Tableau automatically.

1.2.8 Find Alation Metadata in Tableau

In general, you will find Alation metadata in context when working with data in Tableau. Specifically, you'll find metadata in the **Data Details** panel and when viewing tables or databases in Tableau. You may also see warning pop-ups when viewing workbooks with deprecations or warnings.

Alert Pop-up

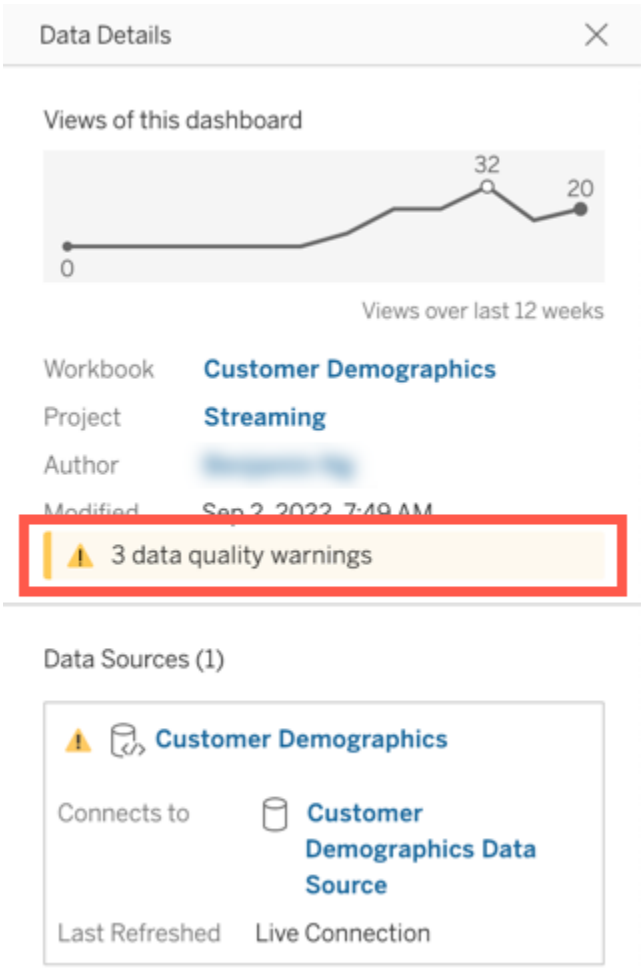
When Alation has sent warnings or deprecations about the view's data, you'll see a warning message at the top of the screen. Click on **Open Data Details** to see more information.



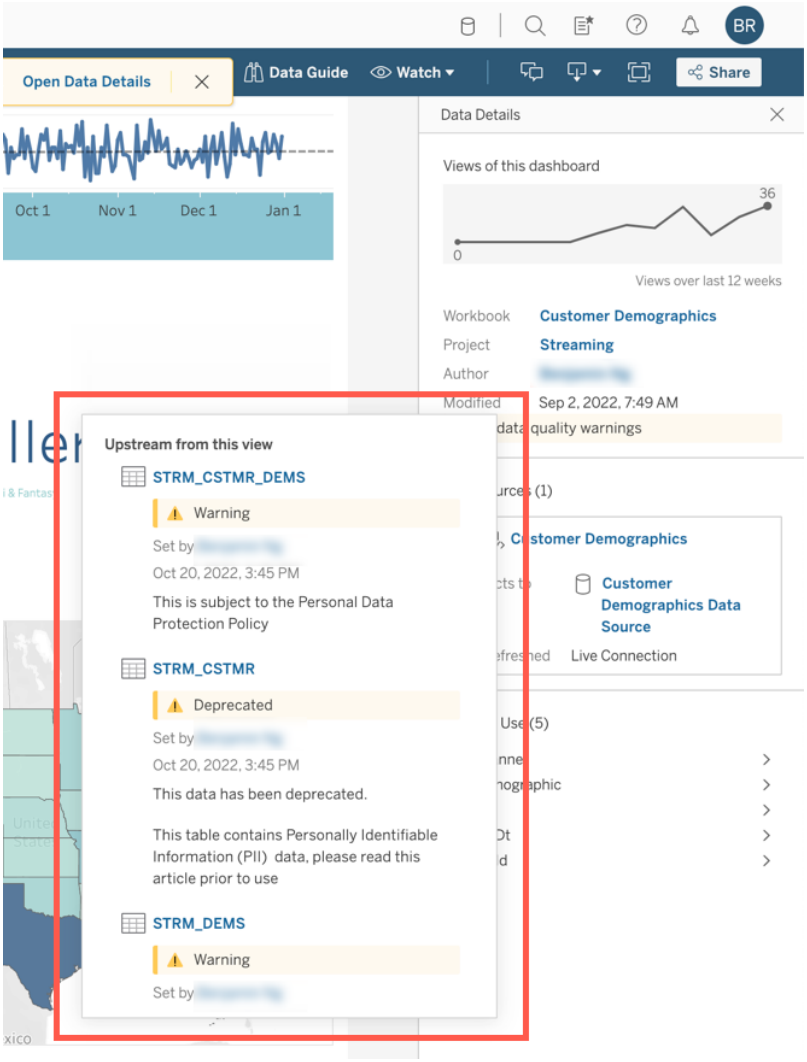
Data Details

You can see Alation metadata at any time by clicking on **Data Details**.

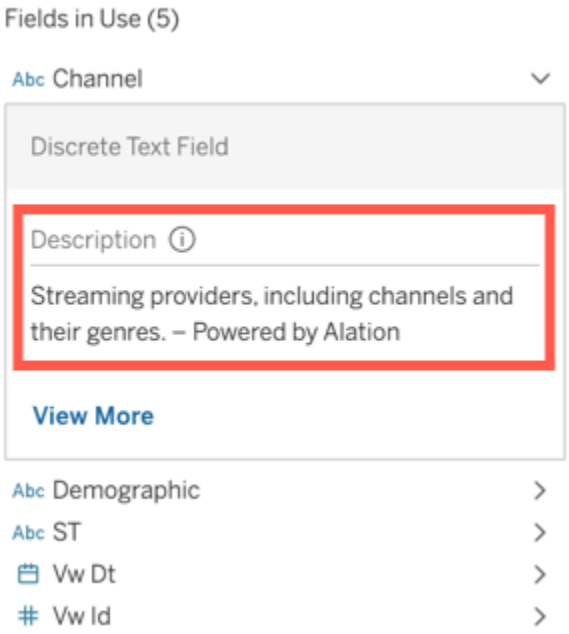
In the **Data Details** panel, click on the yellow warning banner to see specific data quality warnings.



A popup will appear giving details on the warnings that were sent from Alation.

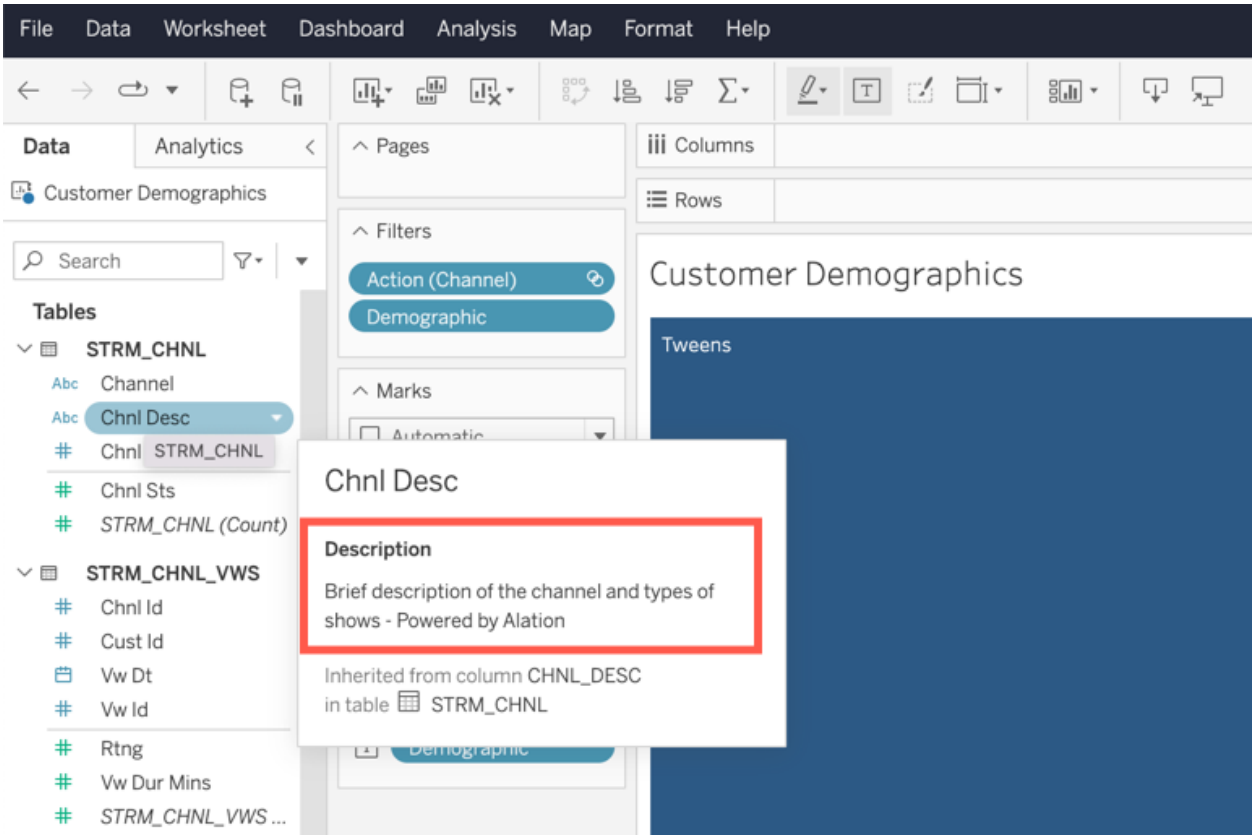


The Data Details panel also shows Alation descriptions of columns under the **Fields in Use** section.



Worksheet Editor Data Panel

Tableau users with a Creator or Explorer (can edit) license can see column descriptions from Alation when editing a worksheet. This enables Tableau editors to better understand the data they're using. Hover over a column name in the **Data** panel to see the description.

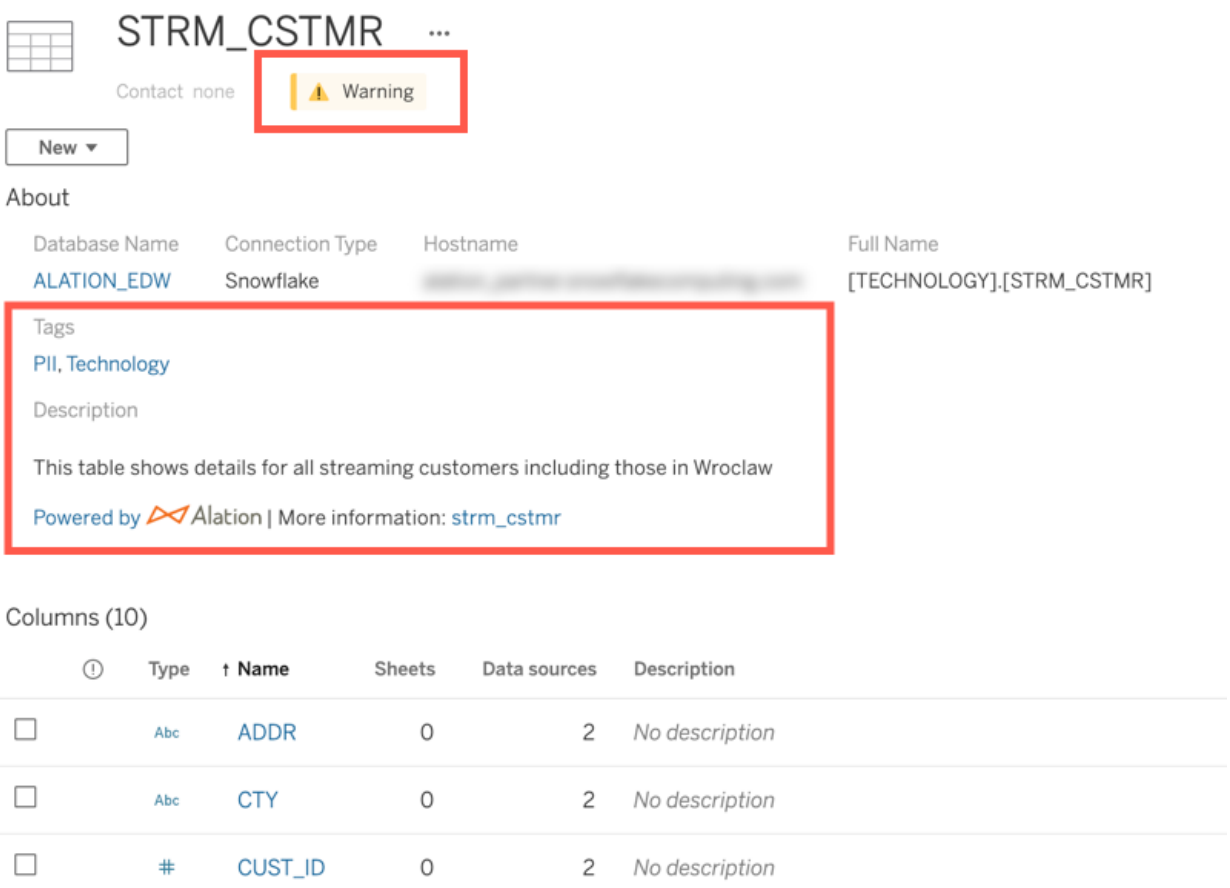


Note: Tableau will not show deprecations, warnings, or tags in the worksheet editor data panel.

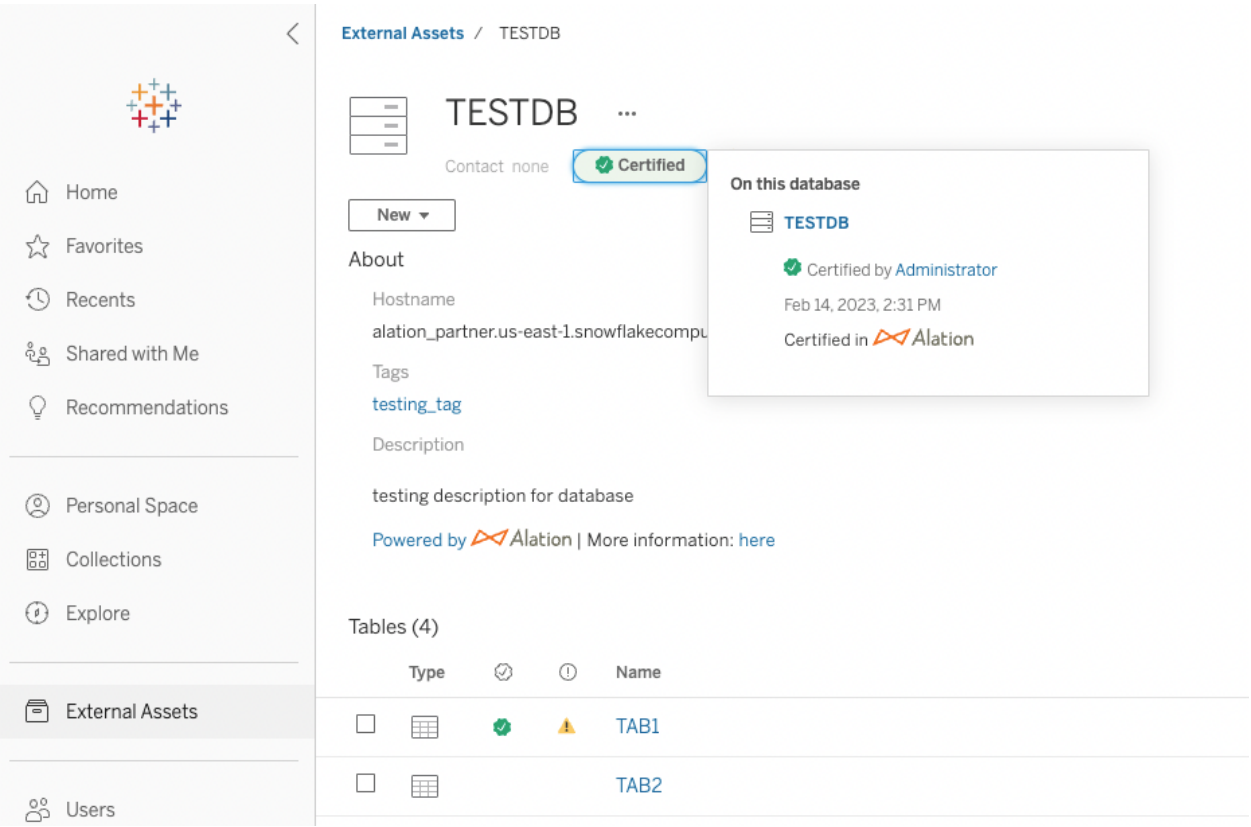
Tableau Data Management External Assets

If you have added Tableau Data Management to your Tableau deployment, you can go to **External Assets** in the left navigation pane and see Alation descriptions, warnings, deprecations, and tags associated with your data.

For example, when viewing a table in Tableau Data Management, you can see the table's description and tags from Alation. You can also see any endorsements (shown as **Certified**), deprecations, and warnings from Alation on the table. (Endorsements were added in 2023.1.4.)



Click on a warning, deprecation, or Certified icon to get details about it. Click the **Powered by** link to go to the Alation home page, or click on the **More information** link to go to the object's catalog page in Alation.



1.3 Alation Anywhere for Microsoft Teams

Alation Cloud Service

Available from 2023.1.5

With Alation Anywhere for Teams, you can connect Alation to Microsoft Teams, enabling you to interact with the Alation catalog directly within Teams. You can search Alation in Teams and post interactive previews of Alation catalog pages to your Teams conversations. By using Alation Anywhere for Teams, you can get more work done without leaving the context of your important work conversations.

1.3.1 Prerequisites

To use Alation Anywhere for Teams, you must be an Alation Cloud Service customer on the cloud native architecture. To determine if you're already on the cloud native architecture or to request migration to it, contact Alation Support.

Alation Anywhere for Teams is not available for on-premise installations of Alation.

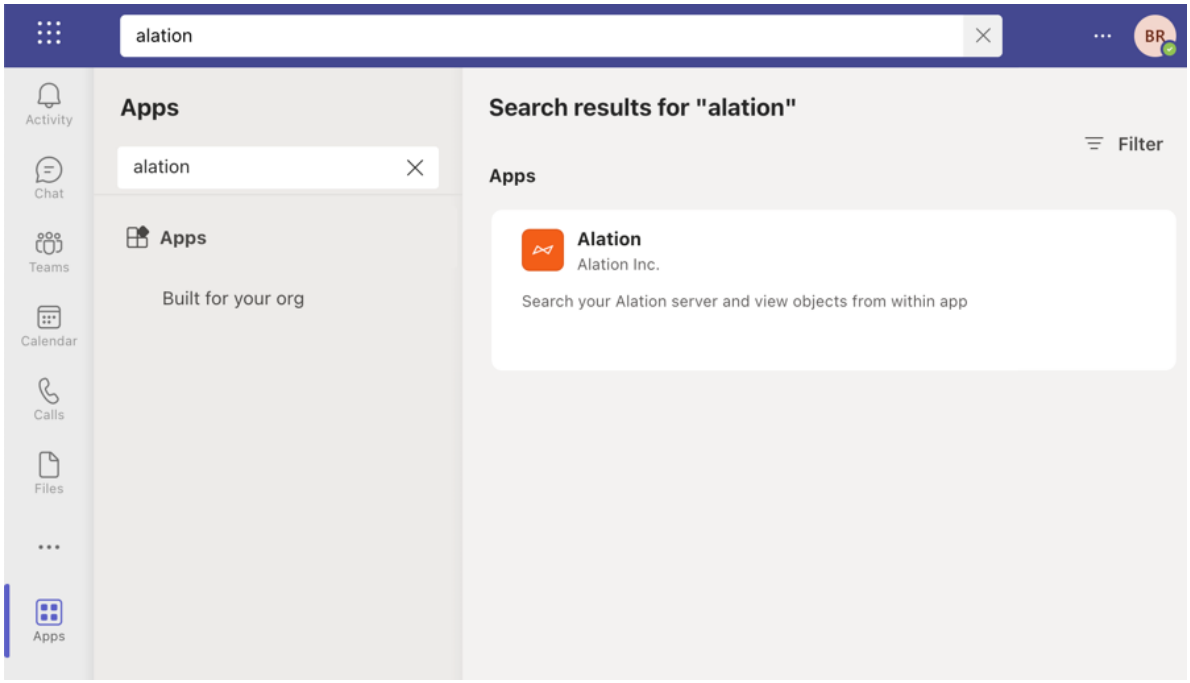
1.3.2 Get Started

Before you can use Alation Anywhere for Teams, you need to install the Alation app in Teams and then log into Alation through Teams.

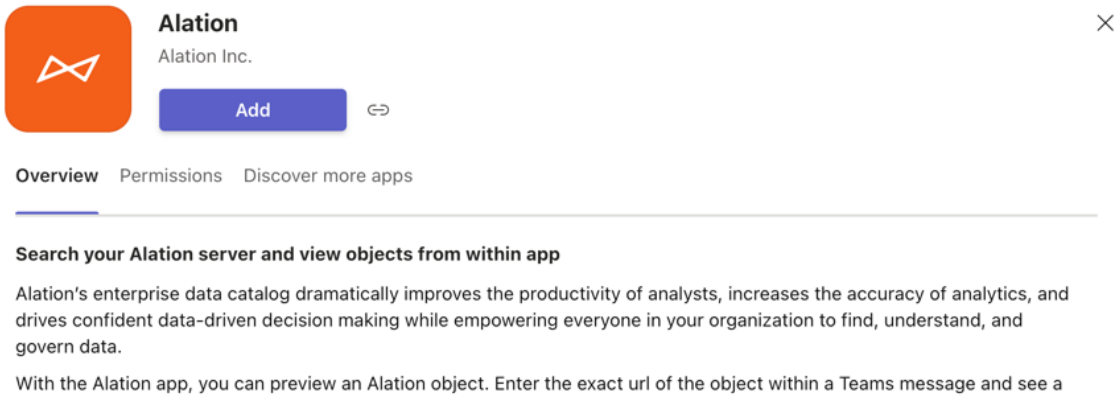
Add Alation to Teams

To add the Alation app to Teams:

1. Open Teams and click **Apps** in the left sidebar.
2. Search for Alation and click on it.



3. Click **Add**.

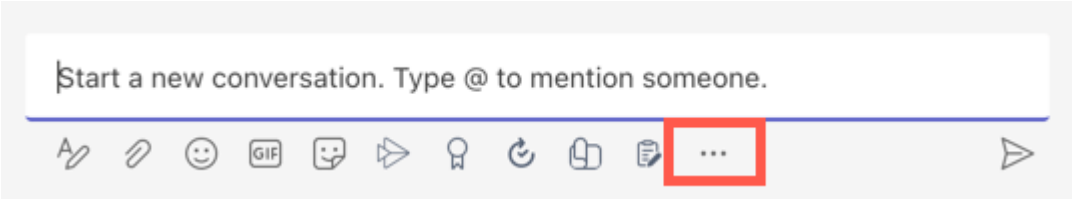


4. You should get a success message. Click **Got it**. Alation has now been added to your Teams application.

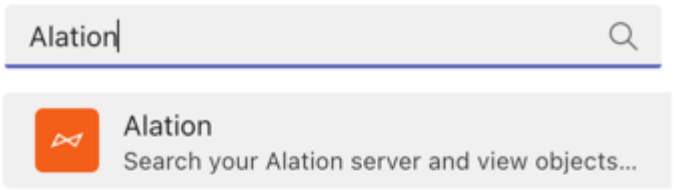
Log Into Alation in Teams

To use Alation Anywhere for Teams, you must be logged into Alation through Teams. To log into Alation through Teams:

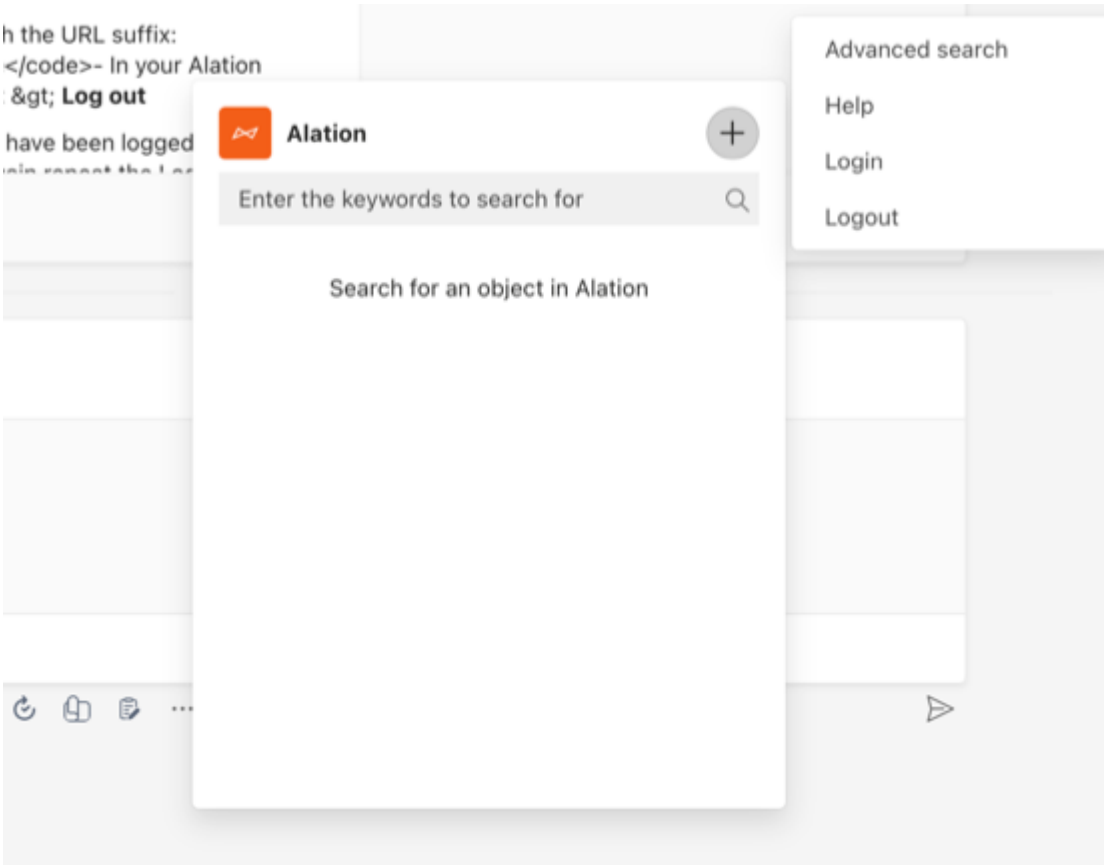
1. At the bottom of a Teams message window, click the three dots (**...**).



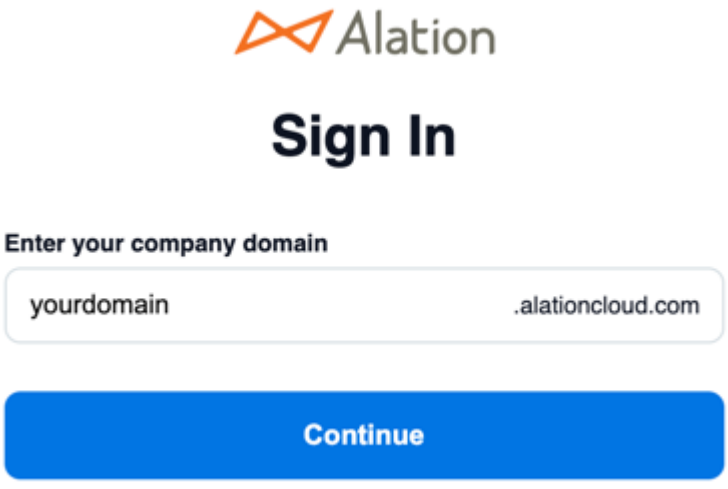
2. If you don't see the Alation app, search for "Alation" using the search box.



3. Select the Alation app.
4. Click the plus (**+**) button in the top right corner of the Alation for Teams app, then select **Login**.



5. Click **Connect**.
6. A new browser tab will open. Enter your company's Alation domain, then click **Continue**.



7. You'll be redirected to the Alation login screen or your identity provider. Enter your credentials and log in. You'll then see a message that you've successfully authenticated.
8. Click **Go to Microsoft Teams**. If your browser asks whether to open Teams, allow it.

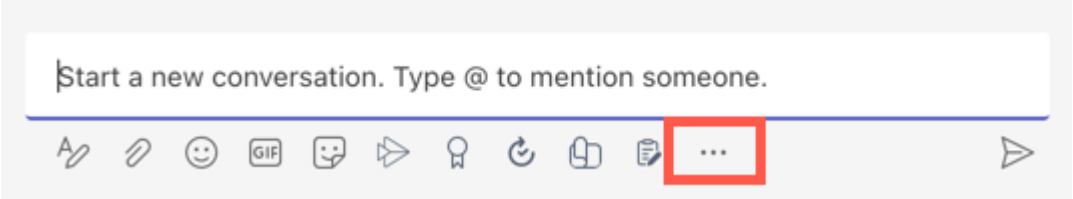
1.3.3 Search Alation in Teams

By searching Alation within Teams, you can find and post information from your Alation catalog without leaving the context of a Teams conversation.

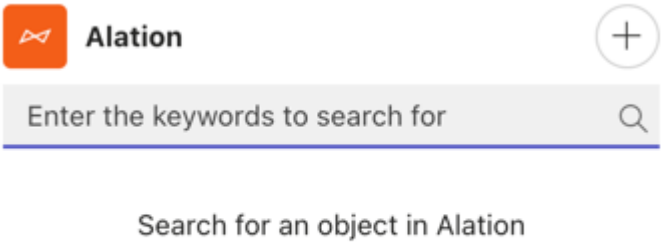
There are two ways to search: simple search and advanced search. The advanced search lets you filter by object type, while the simple search doesn't.

To do a simple search:

1. At the bottom of a Teams message window, click the three dots (**...**).



2. Select the Alation app. The simple search window opens.

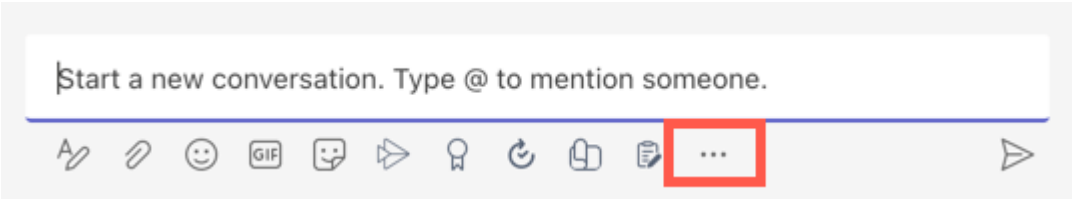


Search for an object in Alation

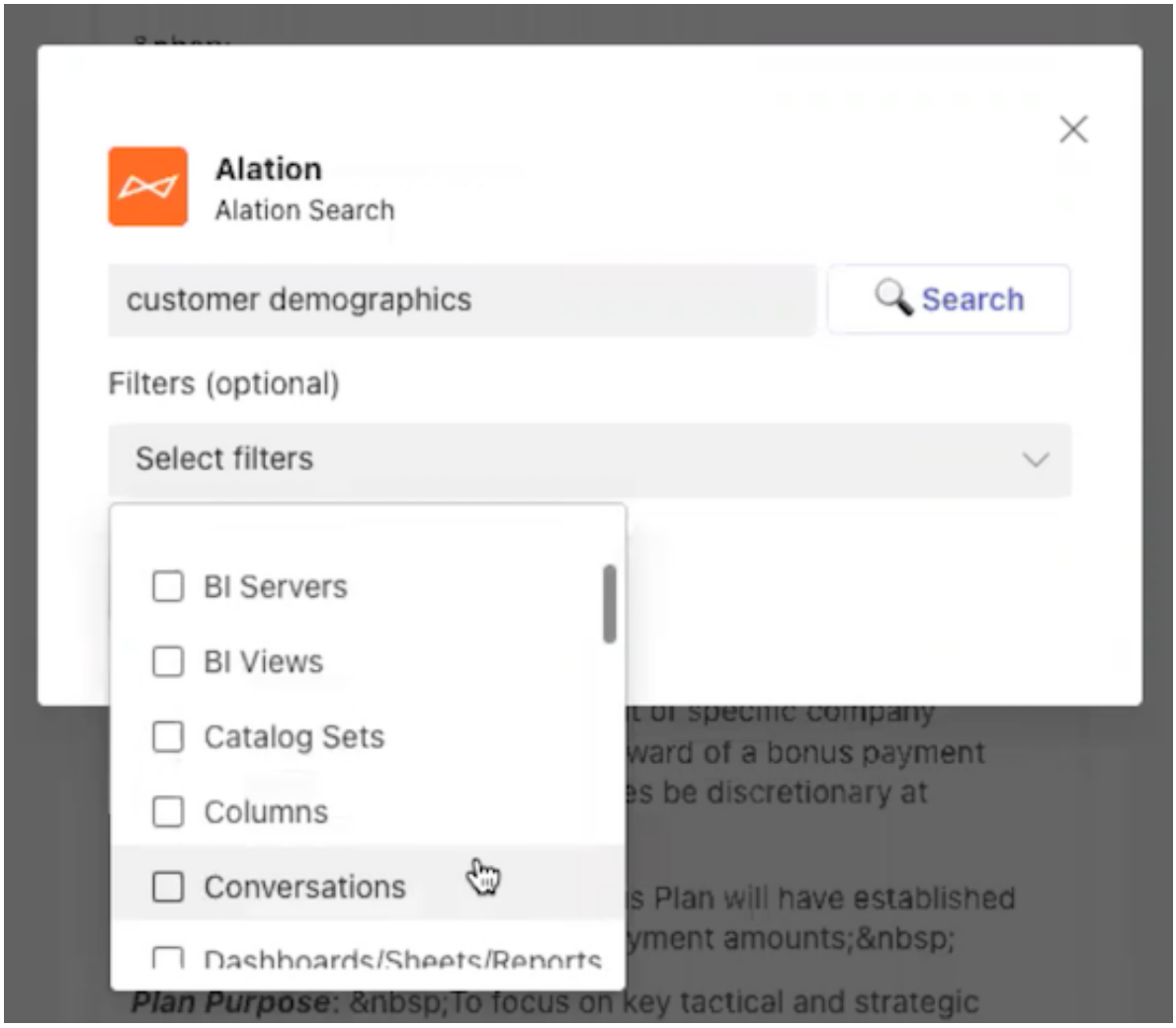
3. Enter your search terms into the search box. A list of the top ten search results appears as you type.
4. Click a search result to add an Alation preview to your message compose box. Type your own message if desired, then post it for your colleagues to see.

To do an advanced search:

1. At the bottom of a Teams message window, click the three dots (**...**).



2. Select the Alation app.
3. Click the plus (**+**) button in the top right corner of the Alation for Teams app, then select **Advanced search**.
4. Enter your search terms into the search box.
5. Optionally, select an object-type filter to limit the search results to a specific object type. You can select multiple object types to filter by.



6. Click **Search**. A list of the top ten search results appears. If you want to see more about one of the results, you can click the title of a search result to open the full page in Alation.
7. When you find what you want, click **Send it to chat** to add an Alation preview to your message compose box. Type your own message if desired, then post it for your colleagues to see.

   If you couldn't find what you wanted, you can use Alation's full search instead. Click **Go to Alation** at the bottom of the search window.

1.3.4 Link to Alation Pages in Teams

If you already have a link to an Alation catalog page, paste it into a Teams message. If it's a fully supported object type, wait a few seconds to get a rich preview of the page in your message. See below for supported object types.

1.3.5 Use Rich Previews of Alation Catalog Pages

When you post a message containing a rich preview of an Alation catalog page, readers can see details about the page directly in Teams without having to go to Alation.

Catalog page previews are interactive. From the preview, you can:

- Open the catalog page by clicking on the page title.
- See trust check flags next to the page title. Hover over the icon to see what kind of flag it is.
- See additional information by clicking the buttons at the bottom of the preview. For example, you can see custom fields for an article or table, a list of columns for a table, raw SQL for a query, and so forth.
- Click the **Star** button to add the page to your favorites in Alation.
- Click the **Watch** button to get notifications when the page is updated.
- For queries, open the query in Compose or open the query form.
- For Alation Conversations, like the Conversation or mark it as resolved.

Supported Object Types

Alation object types that can show rich catalog page previews in Teams are:

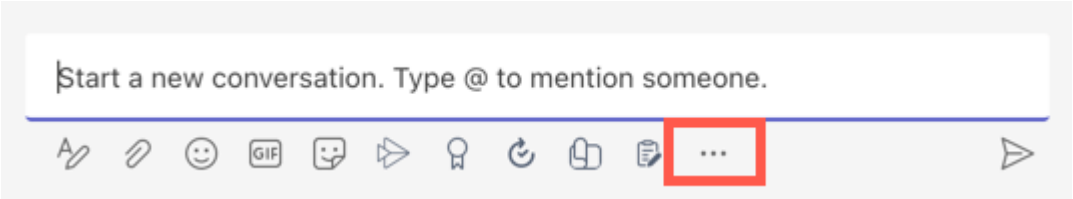
- Articles
- Article groups (old glossaries)
- Conversations
- Data source objects
- Domains
- Glossaries
- Queries
- Table objects

Other Alation objects may show a limited preview when you post from *search* or no preview when you paste a plain *link* into a Teams message.

1.3.6 Get Help in Teams

To see the available Alation commands in Teams:

1. At the bottom of a Teams message window, click the three dots (**...**).



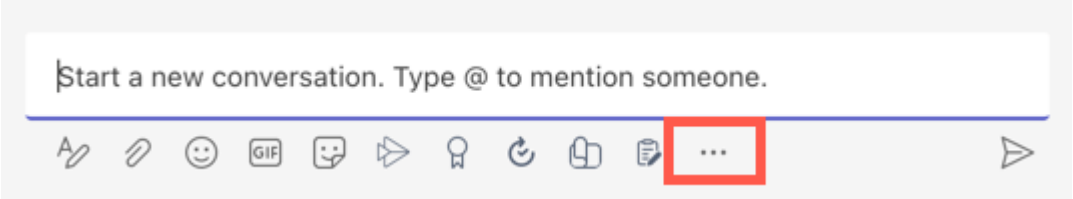
2. Select the Alation app.
3. Click the plus (**+**) button in the top right corner of the Alation for Teams app, then select **Help**. A popup will appear listing the available commands: **search**, **help**, **login**, and **logout**.

1.3.7 Log Out of Alation in Teams

If you want to disconnect Alation from Teams, you can log out of Alation in Teams. You will no longer be able to search Alation within Teams or post or interact with rich previews of Alation pages until you log back in.

To log out of the Alation app in Teams:

1. At the bottom of a Teams message window, click the three dots (**...**).



2. Select the Alation app.
3. Click the plus (**+**) button in the top right corner of the Alation for Teams app, then select **Logout**. You will be logged out immediately.
4. A message will appear confirming that you've been disconnected from Alation. Click **Connect** to log back in or **Not now** to remain logged out.

1.3.8 Support and Privacy

Alation support email: support@alation.com

Alation support site: https://alation.force.com

Alation privacy policy: https://alation.com/privacy-policy

CHAPTER

TWO

ALATION CONNECTED SHEETS

Alation Cloud Service

Alation Connected Sheets brings spreadsheet users the ability to discover curated data sources from the Alation catalog and download that data with simple clicks without leaving the spreadsheet.

Alation Connected Sheets is supported for Google Sheets and Microsoft Excel 2019 and above, web and desktop client.

With Alation Connected Sheets, spreadsheet users can:

- Discover data sources in your organization's Alation catalog.
- Use published queries to self-serve data.
- Automate spreadsheet-based reports or dashboards.
- Build real-time reports in a catalog article or web page.
- View quality indicators such as trust information before using data for analysis.
- Customize download specifics such as table, column, or query selections along with filters and sorts using an intuitive graphical user interface—no SQL required!
- Set a refresh schedule to automatically keep the downloaded data up to date and edit your spreadsheet profile. (In Excel, this requires a file stored in OneDrive or SharePoint.)

2.1 Prerequisites

To use Alation Connected Sheets, your Alation instance must satisfy the following requirements:

- Must be an Alation Cloud Service instance running the Alation cloud native architecture. To determine if you're already on the cloud native architecture or to request migration to it, contact Alation Support.
- Must have available Creator or Explorer licenses for all users running Alation Connected Sheets.

2.2 Supported Data Sources

You can connect to cloud instances of Snowflake, Postgres, MySQL, and Redshift databases, or to customer-managed databases with OCF connectors supporting the Alation Agent as described in the following table:

Data Source	Supported OCF Connector
Azure SQL	v4.1.24
AWS Databricks	v2.1.0
Azure Databricks	v1.1.0
Postgres	v1.5
Snowflake	NA*
Redshift	NA*
SQL Server	v1.2.10
MySQL	v1.3.5
Oracle	v1.4.4

* Connects natively through Connected Sheets connectors. For those data sources behind a firewall, ensure the IP address `44.210.61.77` is added to the allow list.

For more information on OCF connectors, refer to the OCF Support Matrix.

2.2.1 Get Started with Connected Sheets

Alation Cloud Service

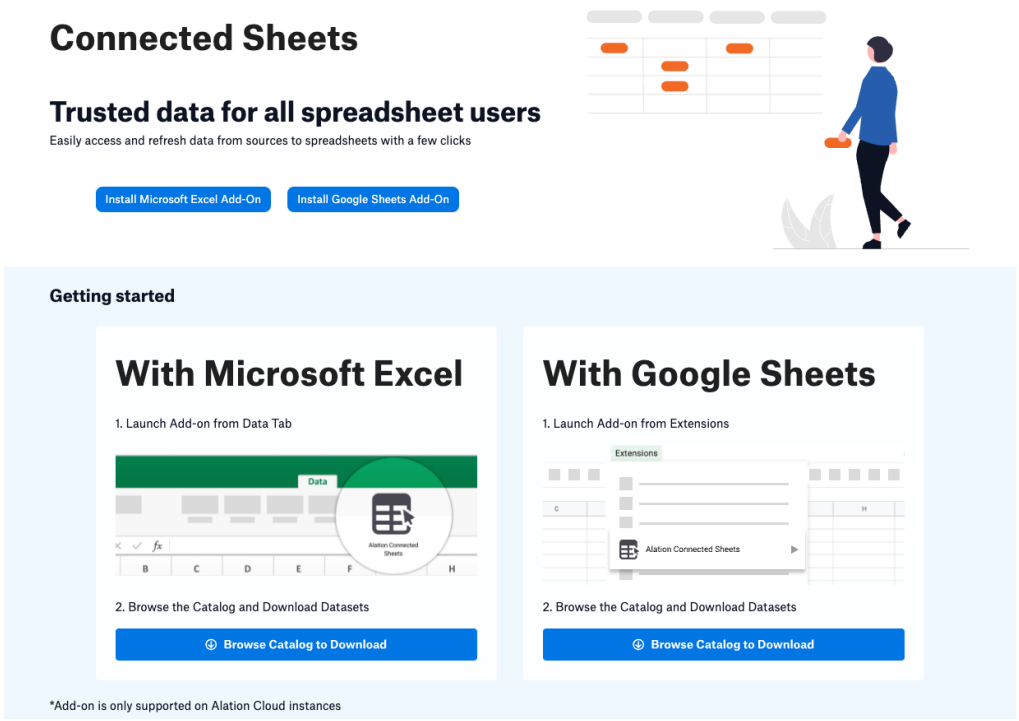
Alation Connected Sheets is supported for Google Sheets and Microsoft Excel 2019 and above, web and desktop client.

- *Getting Started with Google Sheets*
- *Getting Started with Excel*
- *Log Into Alation Instance*

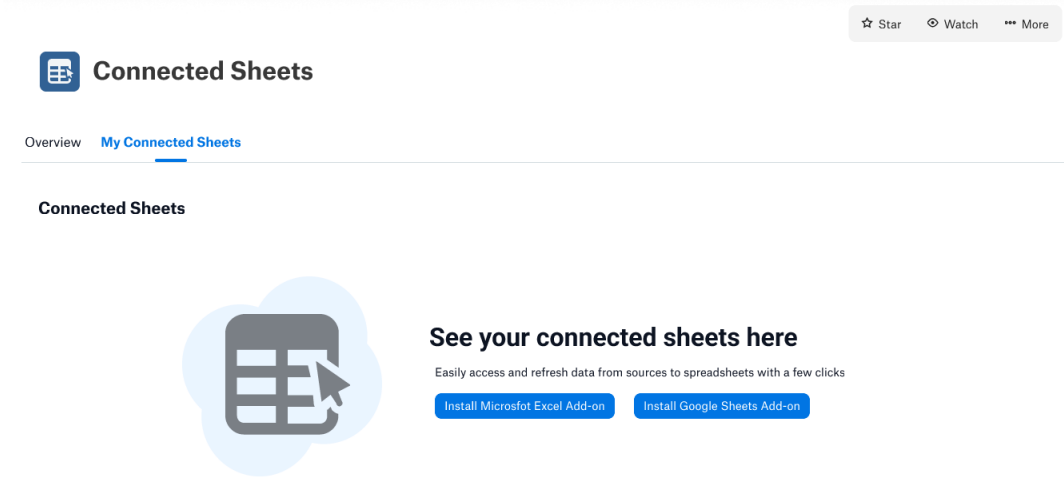
Getting Started with Google Sheets

To get started with Alation Connected Sheets for Google Sheets, do the following:

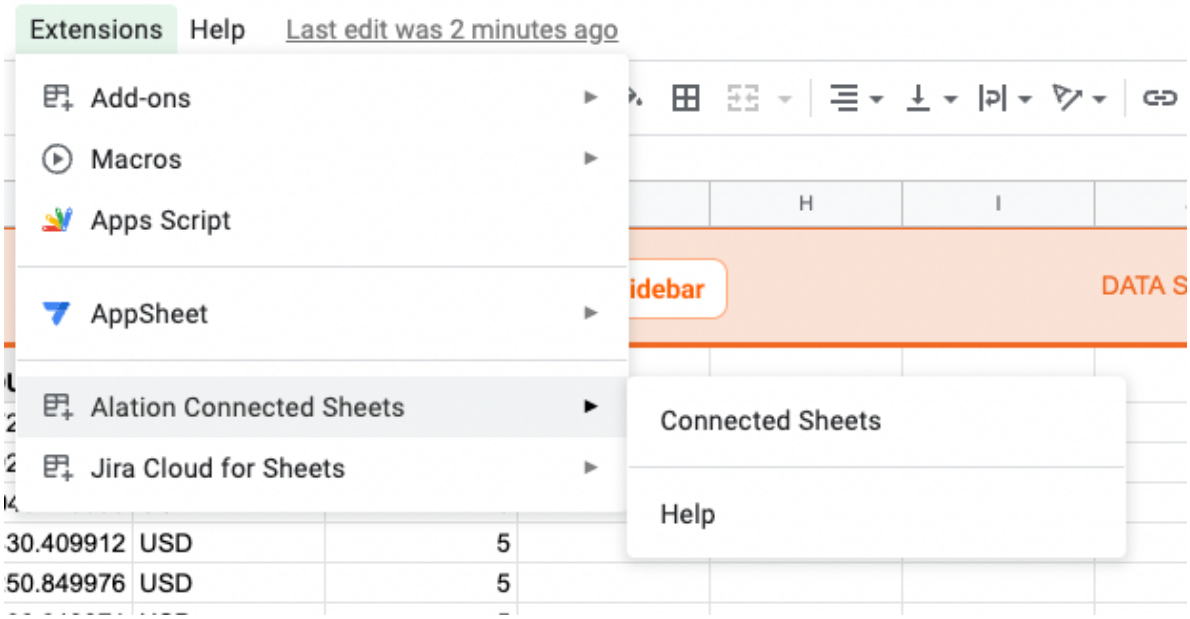
1. From the **Apps** menu in Alation, click **Connected Sheets**. By default, the Connected Sheets landing page appears as follows:



If the Connected Sheets Hub Page is enabled, the landing page is also used as the *hub for viewing and analyzing your Connected Sheets*, and appears like the following:



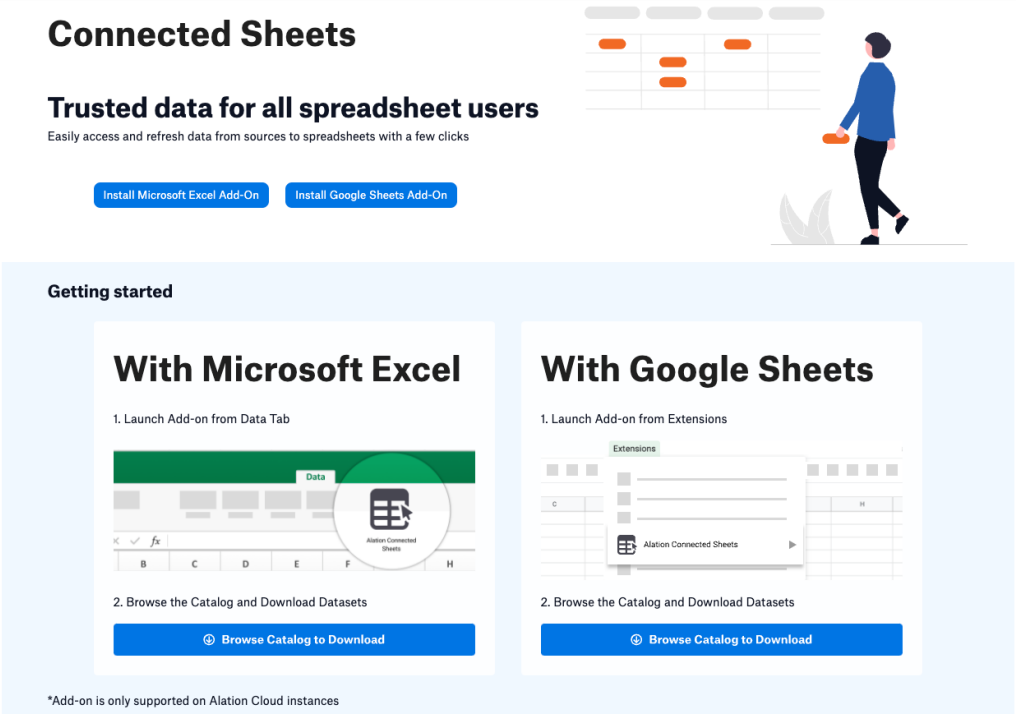
2. Click **Install Google Sheets Add-On** to get the add-on. Google's Workspace Marketplace web page opens in your browser.
3. Click **Install**. You may be asked to log in to Google and authorize Alation Connected Sheets to access your Google account.
4. Open a Google Sheets document and launch **Alation Connected Sheets** from **Extensions**:



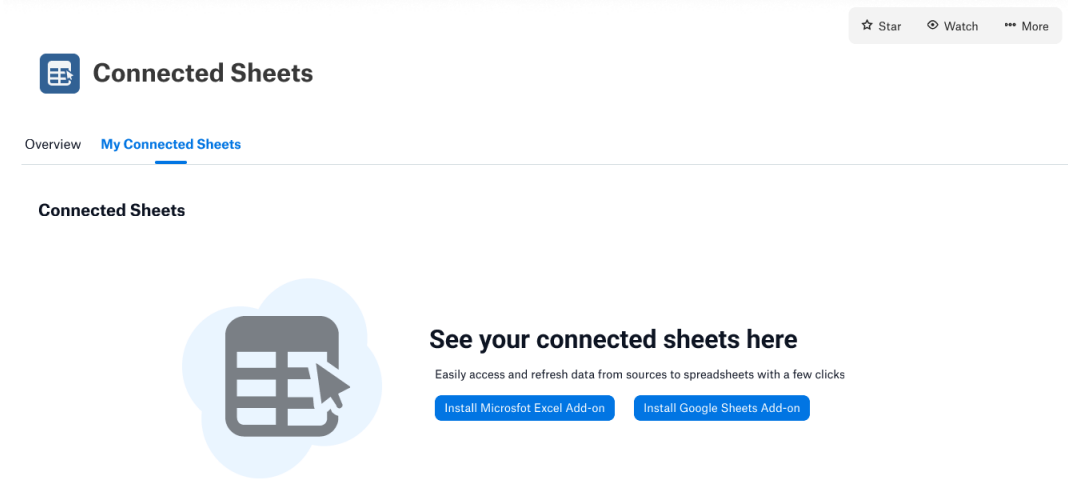
Getting Started with Excel

To get started with Alation Connected Sheets for Excel, do the following:

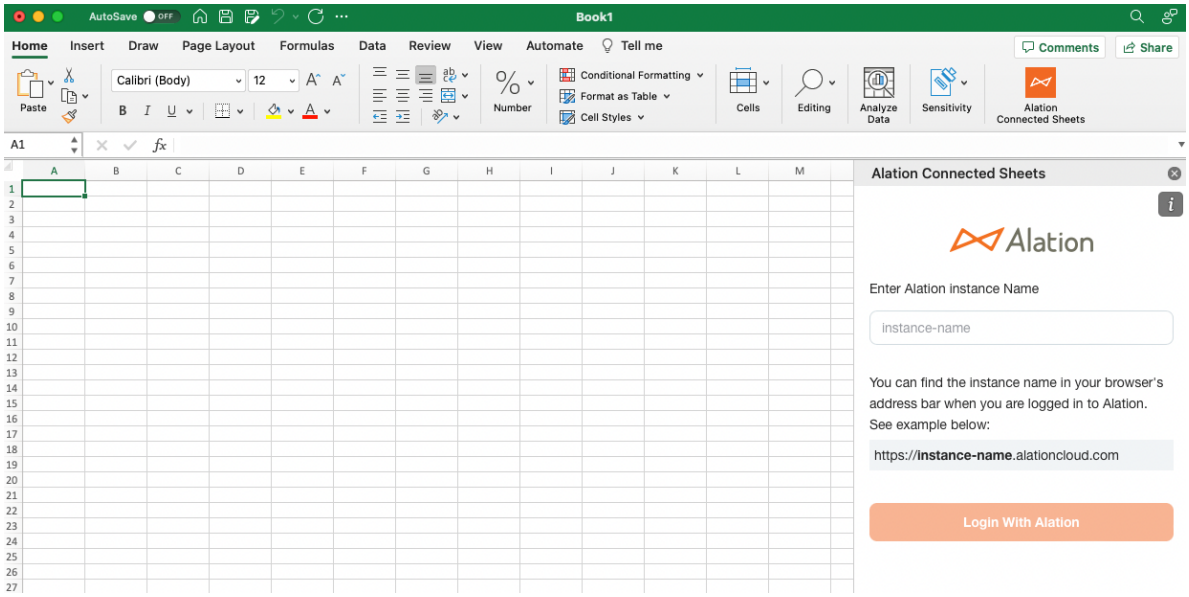
1. From the **Apps** menu in Alation, click **Connected Sheets**. By default, the Connected Sheets landing page appears as follows:



   If the Connected Sheets Hub Page is enabled, the landing page is also used as the *hub for viewing and analyzing your Connected Sheets*, and appears like the following:

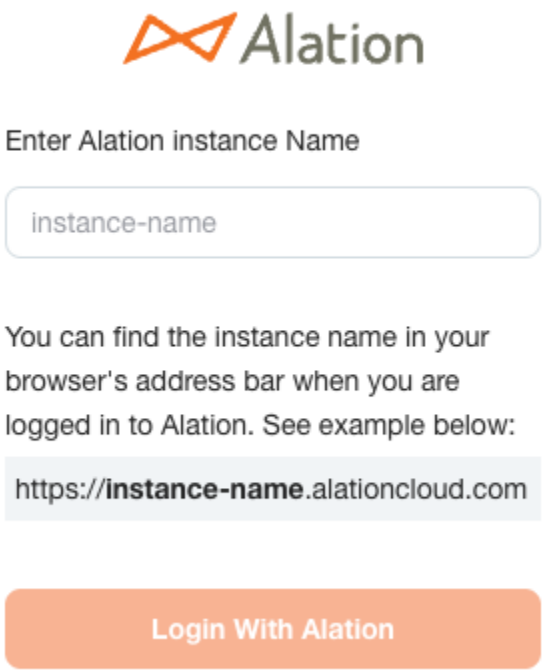


2. Click **Install Microsoft Excel Add-On** to get the add-in. Microsoft's AppSource web page opens in your browser.
3. Click **Get it now**. You are taken to Microsoft 365 to complete the process; this may require a business login for Microsoft.
4. Click **Open in Excel**.
5. Excel and the add-in open and an **Alation Connected Sheets** icon is added to your **Home** ribbon:



Log Into Alation Instance

Once Alation Connected Sheets is launched, you will need to log into your Alation Cloud Service instance. Enter the Alation instance name and then click **Login With Alation**. A new window appears. Use your Alation OAuth credentials to log in for access to the Alation catalog from Alation Connected Sheets:



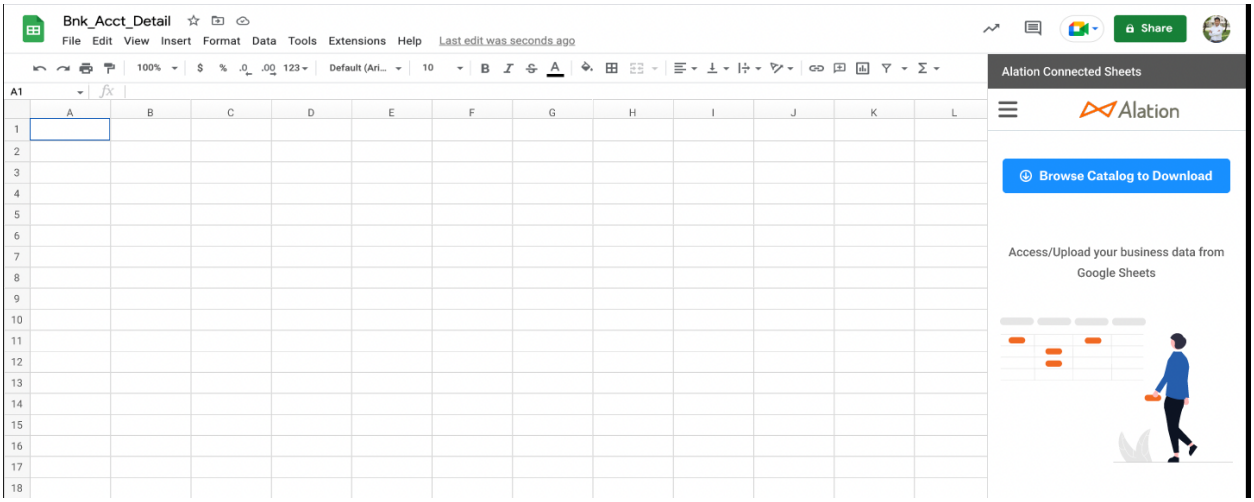
The first time you log into Alation Connected Sheets for Google Sheets, you may be asked to log into your Google account to allow Alation to access your Google Sheets.

2.2.2 Use Connected Sheets

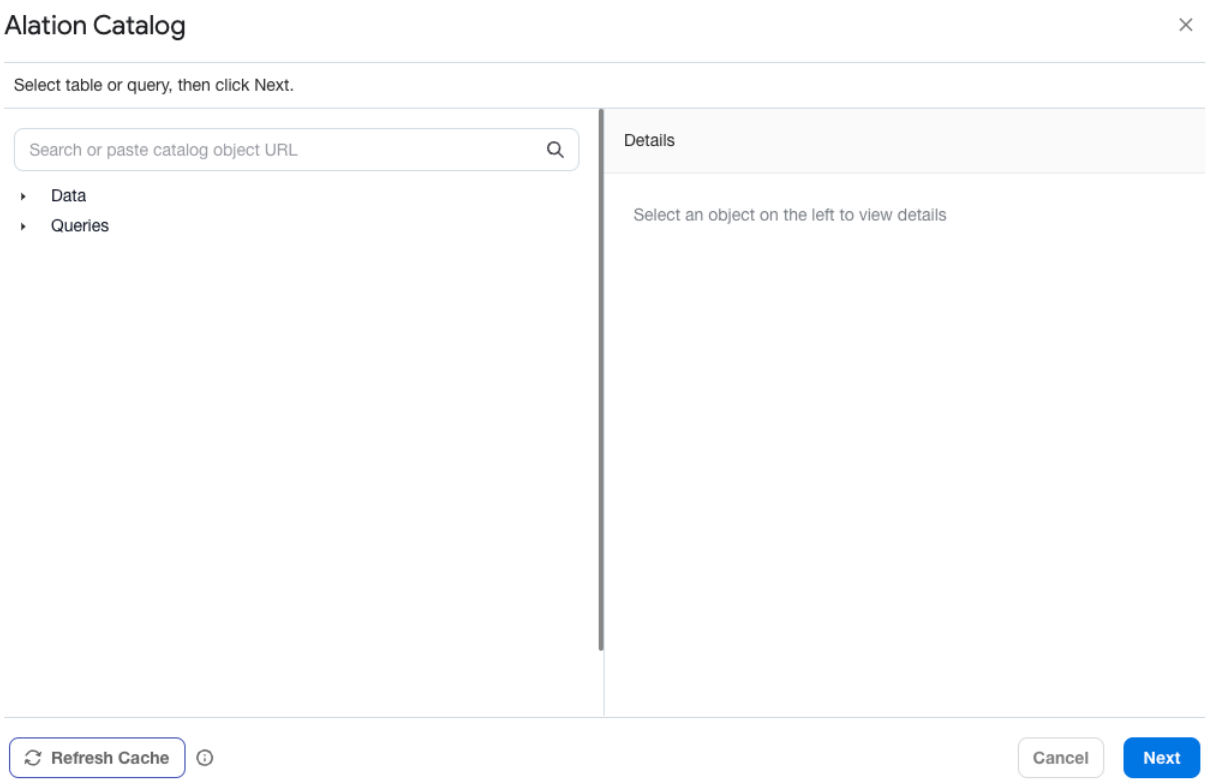
Alation Cloud Service

Download Directly Into Spreadsheets

Once you've signed into your Alation Cloud Service instance, click **Browse Catalog to Download** to view supported database instances:



The **Catalog Browser** dialog appears:



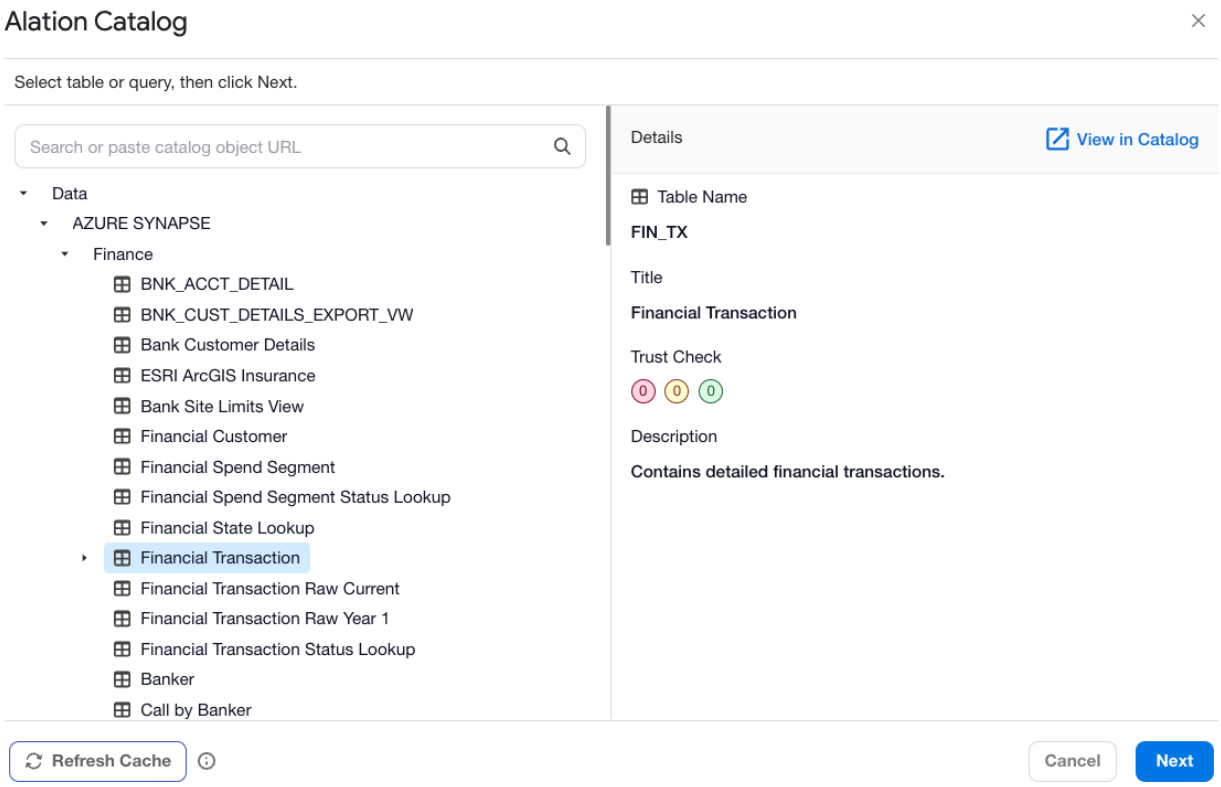
You can navigate the catalog in three ways:

1. You can click through the object hierarchy; data sources and queries are available.
2. You can use search to find data objects.

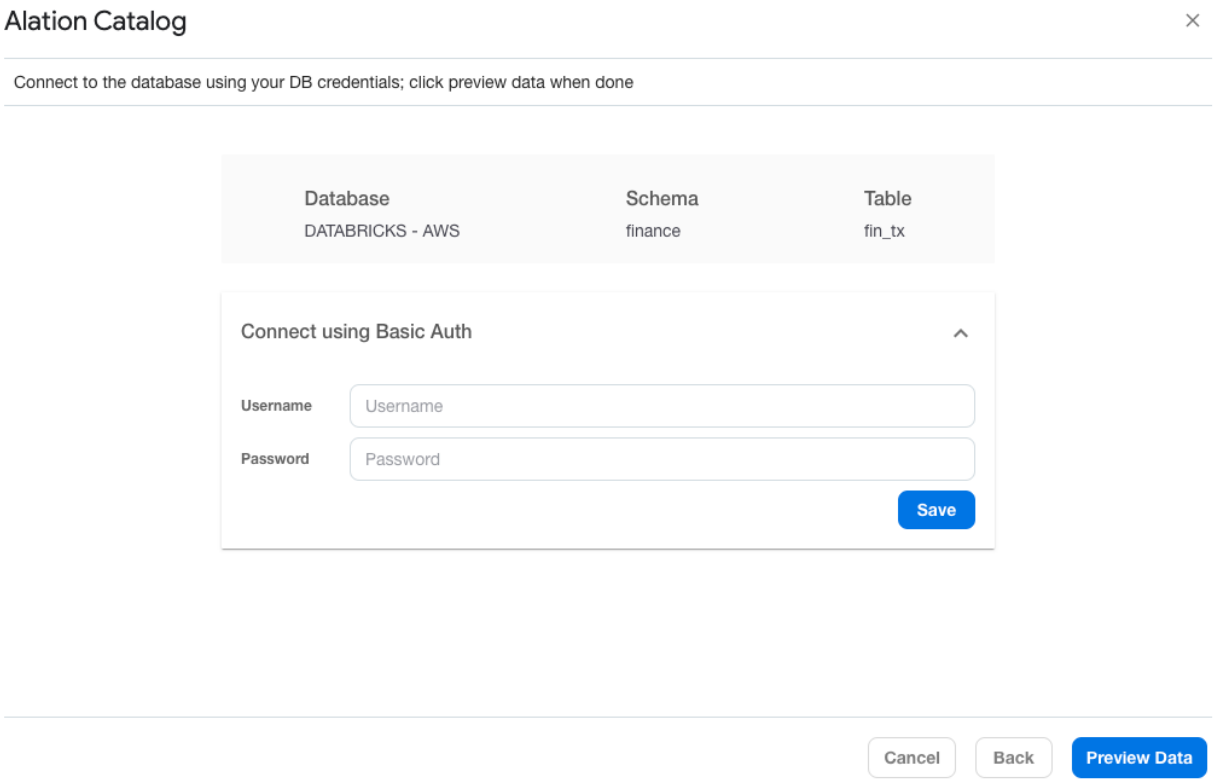
Note: Search strings are applied on the **Name**, **Title**, and **Description** of the objects.

3. You can paste an object catalog URL into the search box.

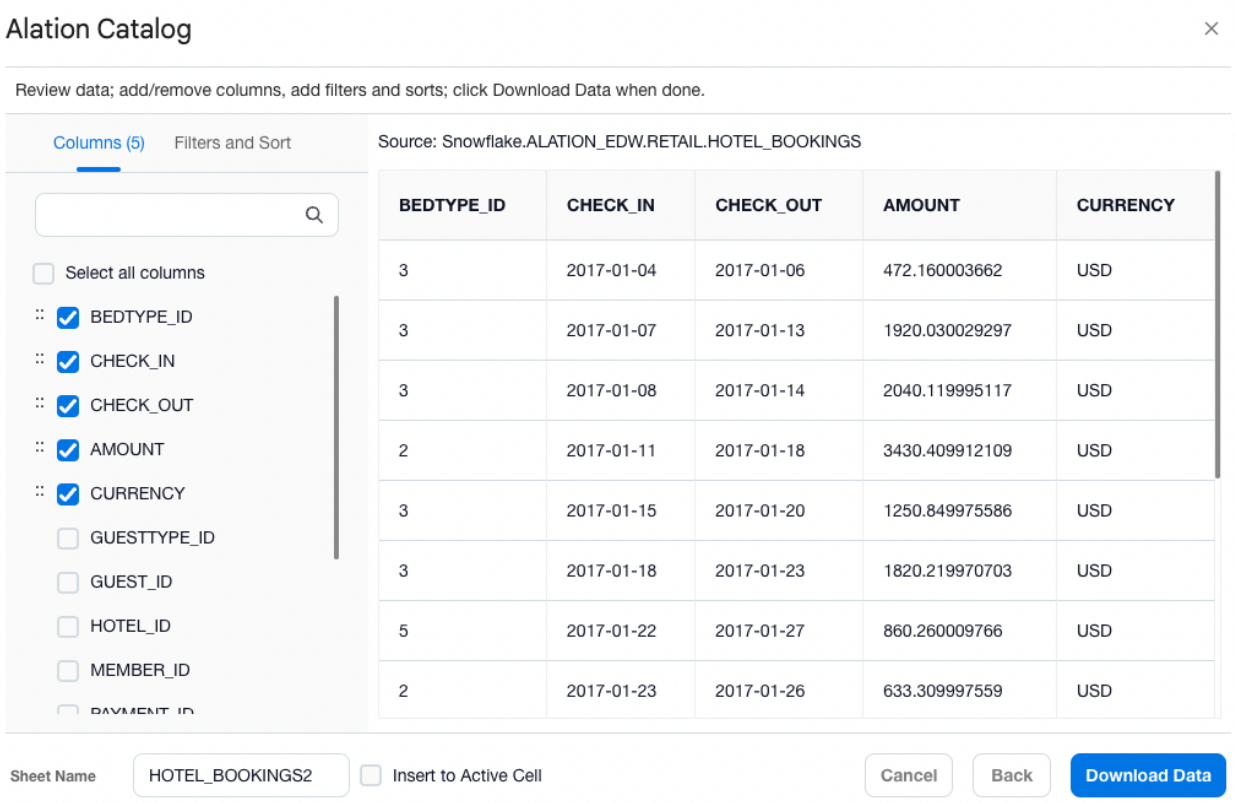
As you click through objects, you can view metadata information from the catalog—including any curation information such as trust check flags showing Endorsements, Warnings, or Deprecations:



When you have found a table or query you are interested in, click **Next** to connect to the relevant database. You are prompted to **Save** the Username and Password for the database:

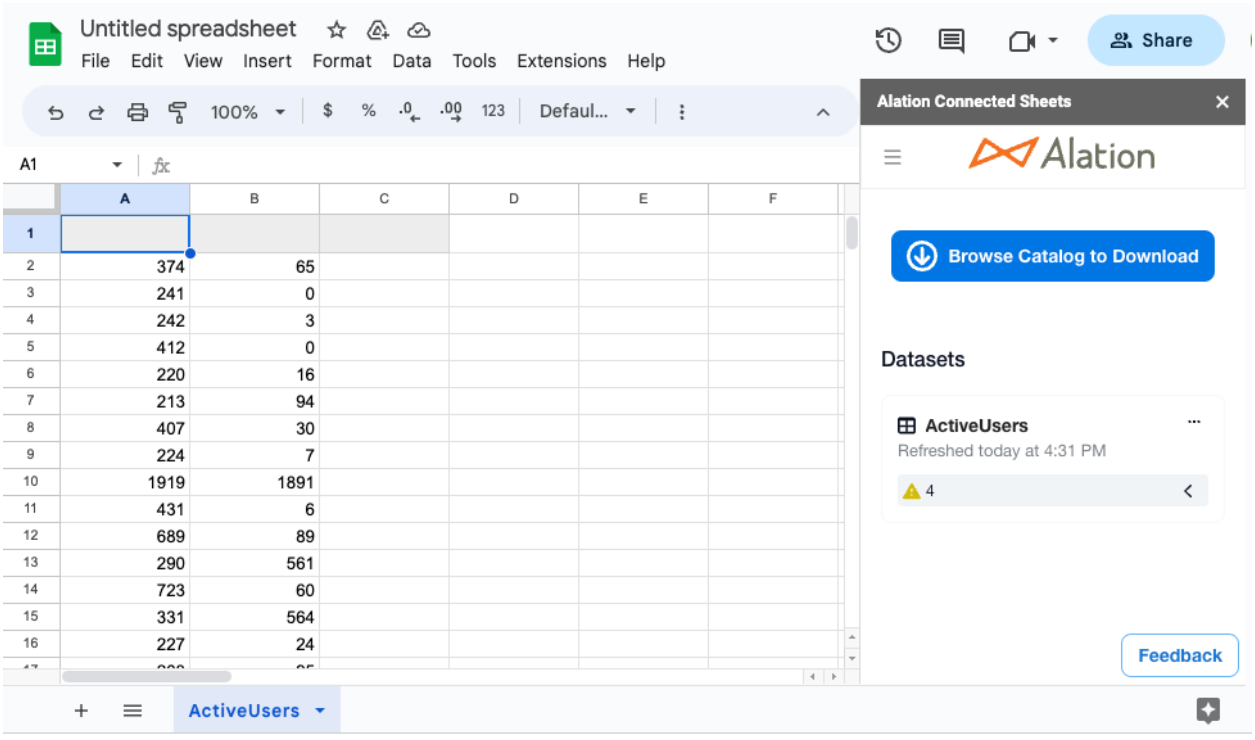


You can preview data with filters or sort criteria before the download. You can also select the order of columns in the downloaded data. On query objects, you can apply filters only if the query supports customizable filter criteria:



You must provide a sheet name for the downloaded data set. The data set will be downloaded into a new sheet by default, or you can override this by selecting **Insert into active cell**.

When you are satisfied with your filters and sort criteria, click **Download Data** to complete the download:

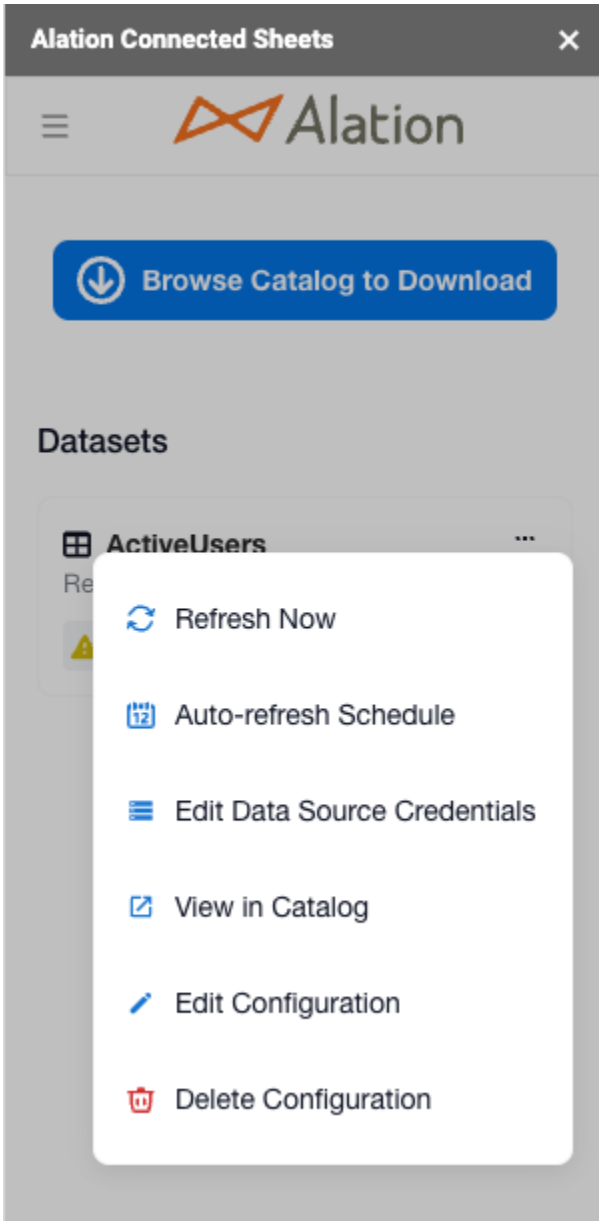


Note: There is a limit of 10 million cells in a connected Google Sheet. If you attempt to download more data than will fit into 10 million cells, you will see an error message.

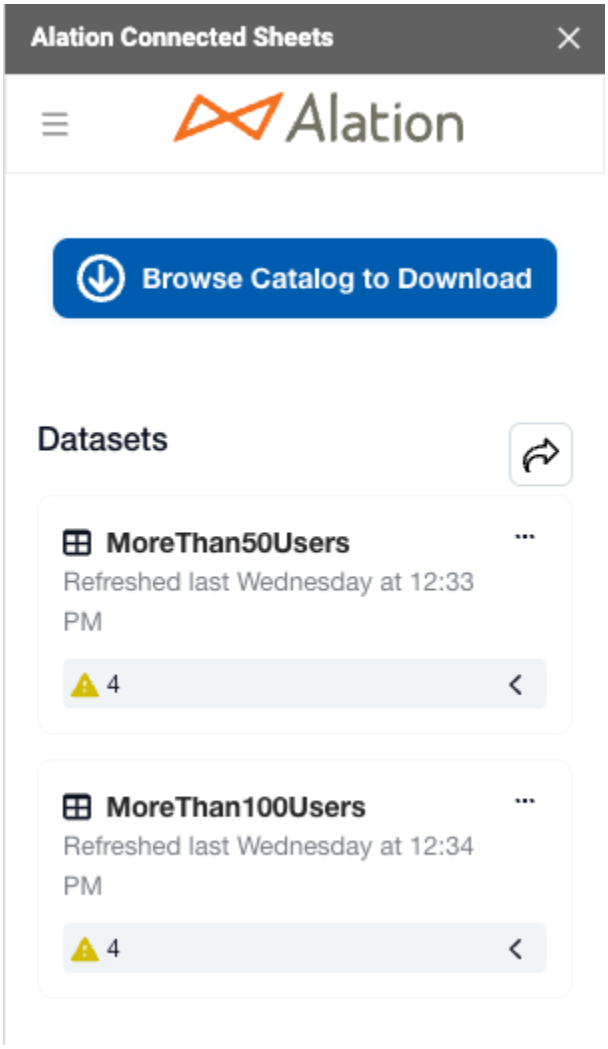
Manage Downloaded Data Configurations

Alation Connected Sheets provides a snapshot of all the download dataset configurations in a spreadsheet and provides easy manageability to:

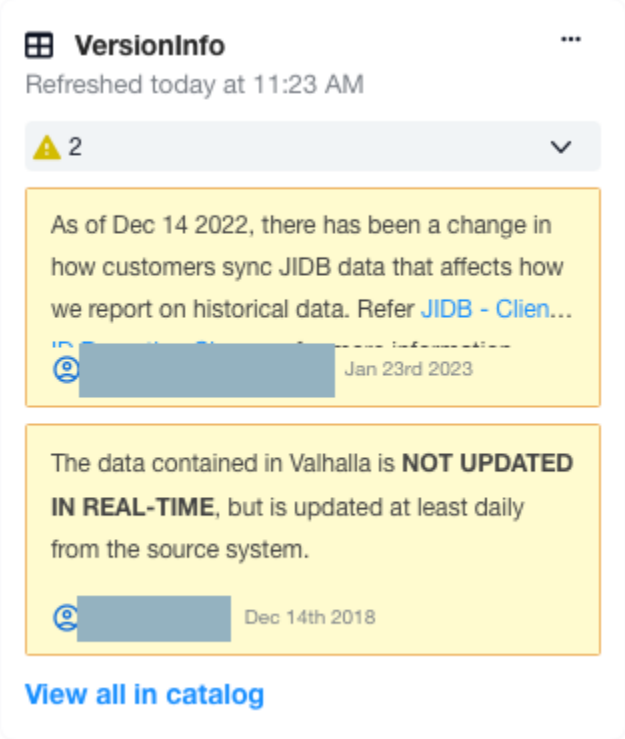
- Instantly refresh data
- Schedule and manage auto-refresh for the data set
- Edit data source credentials
- View the data in the catalog
- Edit a downloaded configuration
- Delete a downloaded configuration



The list of datasets also shows any trust flags available:



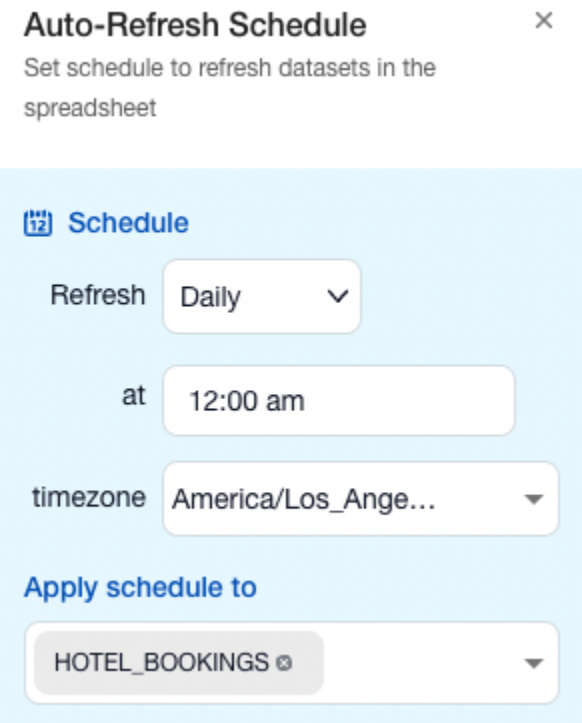
You can expand the view to see pertinent information on the trust flags with a link to view all information in the catalog:



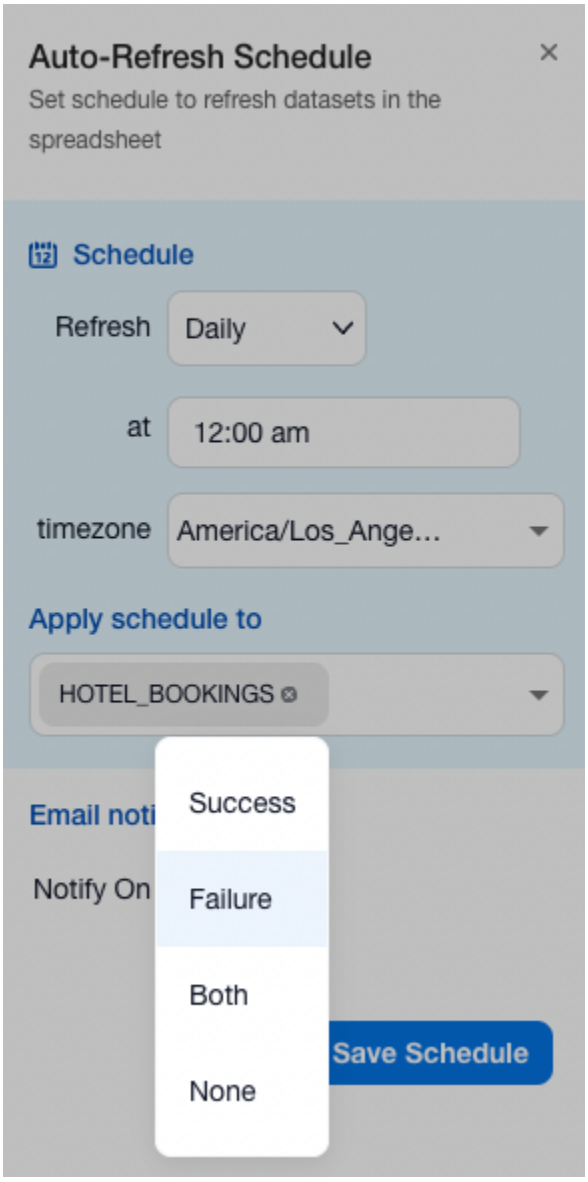
Schedule Auto-refresh

Alation Connected Sheets makes it easy to refresh data and supports the following cadences:

- Hourly: Every 2, 4, 6, 8, or 12 hours from a start time
- Daily: Every day at a certain time (hour, minute) of a chosen time zone
- Weekly: Every week, on one or more days at a particular time (hour, minute, and timezone)
- Monthly: Every month on a specific day of month and time (hour, minute) of a chosen time zone



Status of the auto-refresh schedule will be reflected in the download sheet snapshot view. You can also opt for notifications for success, failure, or both:



Note: If using Alation Connected Sheets in Excel, auto-refresh is available only if the spreadsheet is stored in OneDrive or SharePoint.

Edit a Configuration

When you select **Edit Configuration** from the options menu, you are taken to the **Data Preview** page, where your options are determined by whether you initially chose a table or a query. If a table, you can change the set of columns selected, their order, filters applied, and sort order. If a query, you can change filters only if the query supports customizable filter criteria.

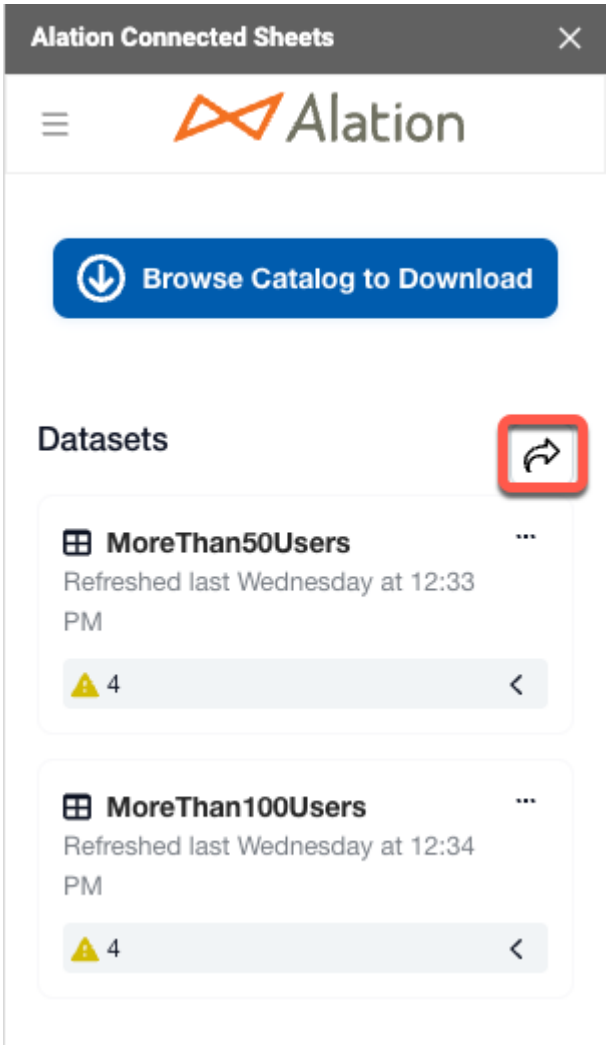
Make your changes, and then click **Update**. The configuration is updated to reflect your changes.

Sharing Connected Sheets

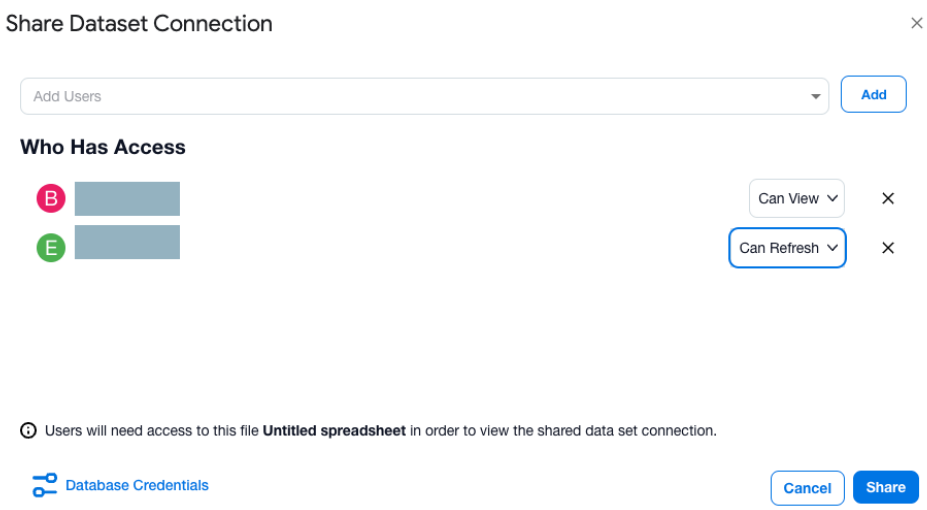
You can share Connected Sheets created with Google Sheets, along with those Connected Sheets created in Excel and stored either in OneDrive or SharePoint. Excel Connected Sheets stored on a local file system cannot be shared.

To share a Connected Sheet:

1. Click the **Share** icon in the Alation Connected Sheets sidebar:



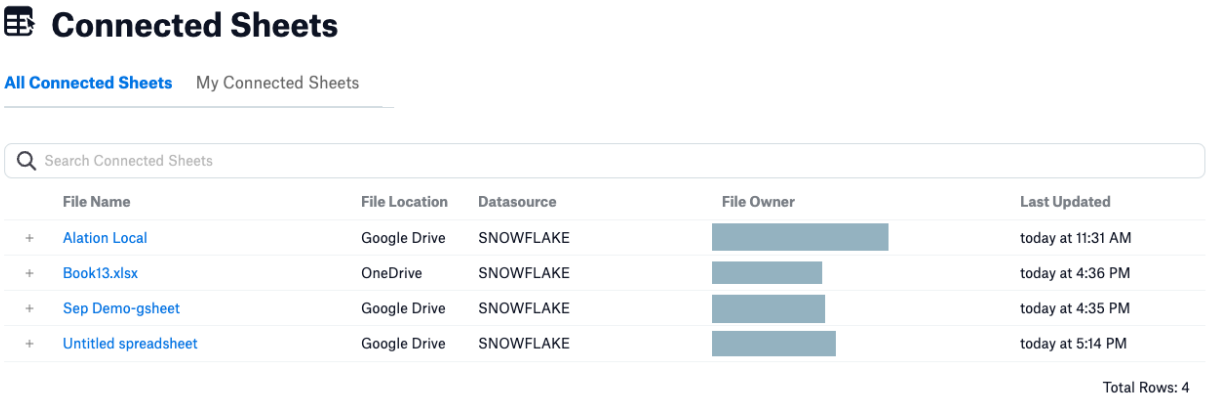
The **Share Dataset Connection** opens:



2. Click the **Add Users** dropdown. An alphabetical list of users with access to the current spreadsheet appears. You can select from the list or provide an email address to invite a new user.
3. Select a user and click **Add**. The selected user appears under **Who Has Access**.
4. Assign the desired level of access, either **Can View** or **Can Refresh**. Can View access allows the selected user to view the downloaded data and view the data source in the Alation catalog. Refresh access allows the selected user to view and refresh the downloaded data in the shared sheet.
5. Specify whether the selected user must use their own credentials to access the data source or to use shared credentials. When shared credentials are allowed, users with Refresh access can refresh the data source even if they don't have credentials for the data source saved. If users are required to use their own credentials, they will need to update the credentials before refreshing the sheet.

Using the Connected Sheets Hub

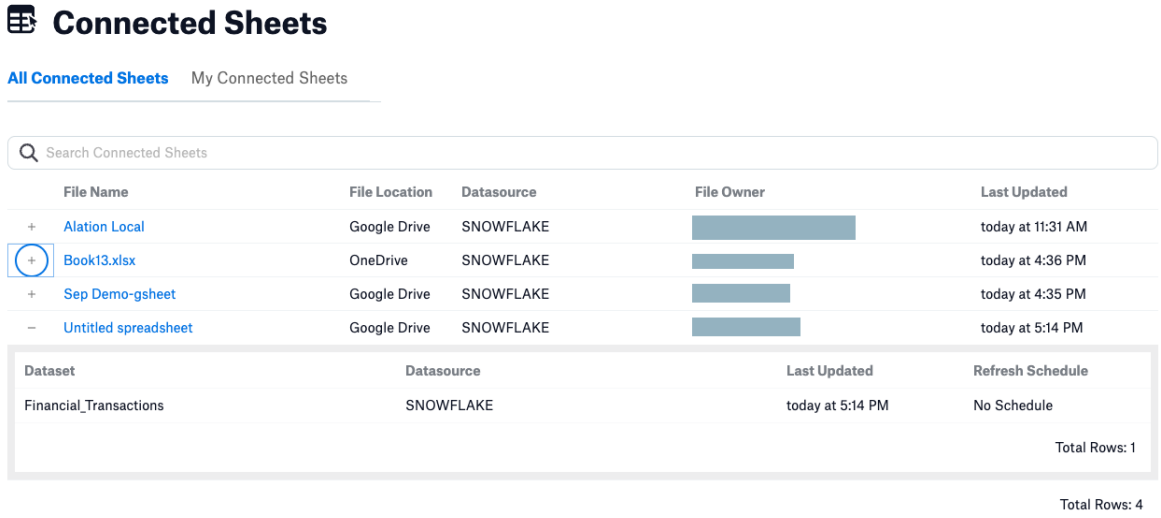
The Connected Sheets Hub gives catalog and server admins a convenient view of the Connected Sheets shared in your organization. To access the Hub, ensure that you are logged into Alation as a Catalog Admin or Server Admin and click **Connected Sheets** from the **Apps** menu. The Connected Sheets Hub appears:



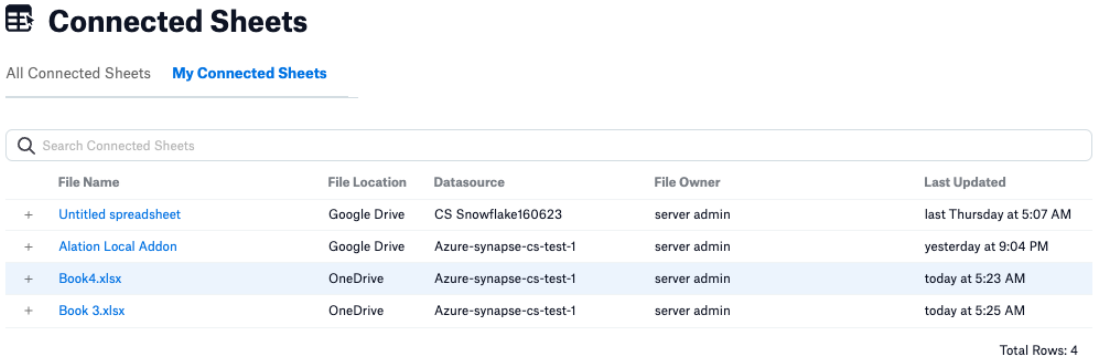
There are two tabs—by default, the **All Connected Sheets** tab opens.

For each shared Connected Sheet, the Hub shows the file name, file location (Google Drive, OneDrive, or

SharePoint), the associated data source, the file owner, and the time the file was last updated. Click the plus sign at the left of any sheet to see more information, including the dataset name and refresh schedule, if any:



To view only those Connected Sheets owned by you, select the **My Connected Sheets** tab:



While you can see all the shared Connected Sheets from the Hub, you can only open those that have been shared with you individually.

2.2.3 Set Up Snowflake OAuth with Connected Sheets

Alation Cloud Service

Snowflake OAuth with Connected Sheets is a limited availability feature. Currently, it is only supported with the Snowflake OCF connector without Alation Agent and requires coordination with Alation Support to be set up.

View the table below to understand if it can be configured on your instance.

Spreadsheet App	Type	Snowflake Connector	Support for SnowflakeOAuth
• Office 365 Excel • Google Sheets	**Web**: • Chrome • Firefox	Without Agent	**Yes**
		With Agent	No
Office 365 Excel	**Desktop**: • MacOS	Without Agent	No
		With Agent	No

Setting Up Snowflake OAuth with Connected Sheets

The steps below assume that your organization is already using single sign-on (SSO) with Snowflake.

Note: We have quality-certified this setup with Okta and Azure Active Directory (AD) as identity providers. While Alation hasn't formally tested other identity providers, this setup is not exclusive to Okta and Azure AD. It is likely that additional identity providers are also compatible.

To set up OAuth:

1. In Snowflake, create a security integration for custom clients using the template below.
    - Feel free to replace the name `ALATION_CS` with a custom name of your choosing.
    - Set the `OAUTH_REFRESH_TOKEN_VALIDITY` parameter to your preferred duration in seconds, matching it with your desired Connected Sheets report refresh frequency. For example, if you want your reports to be refreshed every week, set the `OAUTH_REFRESH_TOKEN_VALIDITY` value to a minimum of `604800` (a week in seconds). Find more information about the security integration parameters in Additional optional parameters in Snowflake documentation.
    - The `OAUTH_REDIRECT_URI` parameter must remain as `'https://connectedsheets.alationcloud.com/auth/snowflakeOAuthCallback'`. Do not modify this value.

```
CREATE SECURITY INTEGRATION ALATION_CS
TYPE = OAUTH
ENABLED = TRUE
OAUTH_CLIENT = CUSTOM
OAUTH_CLIENT_TYPE = 'PUBLIC'
OAUTH_REDIRECT_URI = 'https://connectedsheets.alationcloud.com/auth/
snowflakeOAuthCallback'
OAUTH_ALLOW_NON_TLS_REDIRECT_URI=FALSE
OAUTH_ISSUE_REFRESH_TOKENS = TRUE
OAUTH_REFRESH_TOKEN_VALIDITY = 7776000;
```

2. Retrieve the client ID and secret of the security integration with the command below.

```
SELECT SYSTEM$SHOW_OAUTH_CLIENT_SECRETS('ALATION_CS');
```

3. Record the values for `OAUTH_CLIENT_ID` and `OAUTH_CLIENT_SECRET_2` from the output in a secure location.
4. Open a Support ticket with Alation to complete the configuration, providing the values of `OAUTH_CLIENT_ID` and `OAUTH_CLIENT_SECRET_2` over a secure medium. An Alation Support representative will finalize the configuration and notify you via the Support ticket.